Content

1. Introduction .................................................................................................................................. 4
2. System requirements ................................................................................................................... 5
3. Working with the program.......................................................................................................... 6
   3.1. User interface ....................................................................................................................... 6
   3.2. Display principles ................................................................................................................ 7
   3.3. Main menu ........................................................................................................................... 9
   3.4. Data entry ........................................................................................................................... 12
      3.4.1. Creating a new document ............................................................................................ 12
      3.4.2. Orchestral instruments ............................................................................................... 13
      3.4.3. Adding notes and symbols .......................................................................................... 14
      3.4.4. Adding expressions ...................................................................................................... 15
      3.4.5. Adding chords ............................................................................................................. 16
      3.4.6. Adding design elements .............................................................................................. 17
      3.4.7. Intervals Input .............................................................................................................. 18
      3.4.8. Adding notes with the virtual piano ............................................................................ 19
      3.4.9. Adding notes with the virtual guitar .......................................................................... 20
      3.4.10. Keyboard entry .......................................................................................................... 21
      3.4.11. Input through MIDI device (MIDI keyboard) ......................................................... 22
      3.4.12. Editing notes and symbols ....................................................................................... 23
      3.4.13. Measure and page numeration of the composition ................................................... 24
      3.4.14. Hide empty staves .................................................................................................... 25
   3.5. Element properties ............................................................................................................. 26
      3.5.1. Document properties .................................................................................................. 26
      3.5.2. Section properies ........................................................................................................ 28
      3.5.3. Part properties ............................................................................................................ 29
      3.5.4. Staff properties ........................................................................................................... 30
      3.5.5 Voice properties .......................................................................................................... 31
      3.5.6. Measure properties .................................................................................................... 32
      3.5.7. Grace note properties ................................................................................................. 33
      3.5.8. Text properties ........................................................................................................... 34
      3.5.9. Instrument properties ................................................................................................. 35
      3.5.10. Guitar properties ...................................................................................................... 36
      3.5.11. Font list ..................................................................................................................... 37
   3.6. Templates ........................................................................................................................... 38
      3.6.1. Symbols ....................................................................................................................... 38
      3.6.2. Expressions ................................................................................................................. 39
      3.6.3. Chords ......................................................................................................................... 40
      3.6.4. Drum map .................................................................................................................... 41
      3.6.5. Guitar list ..................................................................................................................... 42
      3.6.6. Transposing ............................................................................................................... 43
      3.6.7. Instruments ................................................................................................................. 44
      3.6.8. Key signature .............................................................................................................. 45
      3.6.9. Devices ....................................................................................................................... 46
   3.8. Formatting .......................................................................................................................... 47
   3.9. Program settings ................................................................................................................ 48
3.10. Playback................................................................................................................................. 50
3.11. Recording.............................................................................................................................. 51
3.12. Managing tempo .................................................................................................................. 52
3.13. Working with sound ............................................................................................................ 53
3.14. Adjusting playback ............................................................................................................. 54
3.15. Sound fonts ........................................................................................................................ 55
3.16. Extra MIDI events ............................................................................................................. 56
3.17. Drum notes ........................................................................................................................ 57
3.18. Tablature ............................................................................................................................ 58
3.19. Transpose .......................................................................................................................... 59
3.20. Music record in audio file format ....................................................................................... 60
3.21. Fonts.................................................................................................................................... 61
3.22. Metronome ........................................................................................................................ 62
3.23. The Navigator .................................................................................................................... 63
3.24. Hot keys ............................................................................................................................. 64
4. References ............................................................................................................................... 69

4.1. Document tools .................................................................................................................... 69
  4.1.1. Creating a new document ................................................................................................. 69
  4.1.2. Adding a part ................................................................................................................... 69
  4.1.3. Deleting a part ................................................................................................................ 69
  4.1.4. Changing part properties ............................................................................................... 69
  4.1.5. Adding a staff to a part .................................................................................................. 69
  4.1.6. Deleting a staff from a part ............................................................................................ 70
  4.1.7. Changing staff properties ............................................................................................. 70
  4.1.8. Adding a measure ......................................................................................................... 70
  4.1.9. Deleting a measure ....................................................................................................... 70
  4.1.10. Changing the clef on a staff ......................................................................................... 71
  4.1.11. Changing the key signature ......................................................................................... 71
  4.1.12. Changing the time signature ....................................................................................... 71
4.2. Marking sheets ...................................................................................................................... 71
  4.2.1. Sheet settings ................................................................................................................ 71
  4.2.2. Staff margins ................................................................................................................. 72
  4.2.3. Intervals between staves ............................................................................................... 72
  4.2.4. Spaces between measures ............................................................................................ 72
  4.2.5. Page breaks .................................................................................................................. 72
  4.2.6. Setting measure alignment style ................................................................................... 72
4.3. Working with notes .............................................................................................................. 73
  4.3.1. Adding a note ................................................................................................................ 73
  4.3.2. Adding a rest ................................................................................................................ 73
  4.3.3. Adding a triplet ............................................................................................................. 74
  4.3.4. Changing pitch .............................................................................................................. 74
  4.3.5. Changing duration ....................................................................................................... 74
  4.3.6. Changing note position ............................................................................................... 75
  4.3.7. Setting the style for beaming notes .............................................................................. 75
  4.3.8. Joining notes ................................................................................................................. 75
  4.3.9. Changing note stem direction ....................................................................................... 76
  4.3.10. Changing the spacing between notes ...................................................................... 76
  4.3.11. Changing the position and angle of beams .............................................................. 76
4.4. Working with symbols .......................................................................................................... 76
  4.4.1. Adding note symbols ................................................................................................... 76
  4.4.2. Adding staff symbols ................................................................................................ 77
  4.4.3. Adding expression ....................................................................................................... 77
4.4.4. Adding grace notes ..................................................................................................... 77
4.4.5. Adding ties and slurs (liga) ......................................................................................... 77
4.4.6. Changing symbol positions ...................................................................................... 78
4.4.7. Changing symbol sizes .............................................................................................. 78
4.4.8. Saving symbols ......................................................................................................... 78
4.4.9. Adding symbols to the templates list ........................................................................ 78
4.4.10. Removing symbols from the templates list ............................................................. 79
4.5. Working with chords ..................................................................................................... 79
  4.5.1. Adding a chord .......................................................................................................... 79
  4.5.2. Adding a chord definition ......................................................................................... 79
  4.5.3. Adding a guitar diagram ......................................................................................... 79
  4.5.4. Saving chords .......................................................................................................... 80
  4.5.5. Adding a chord to the templates list ........................................................................ 80
  4.5.6. Removing a chord from templates list .................................................................... 80
4.6. Working with design elements ..................................................................................... 81
  4.6.1. Adding a design element .......................................................................................... 81
  4.6.2. Adding lyrics ........................................................................................................... 81
  4.6.3. Changing design elements ....................................................................................... 81
  4.6.4. Text alignment ......................................................................................................... 82
  4.6.5. Text orientation ....................................................................................................... 82
4.7. Changing voices ............................................................................................................ 82
  4.7.1. Adjusting voice dynamics ....................................................................................... 82
  4.7.2. Voice editor ............................................................................................................. 82
4.8. Adjusting playback ....................................................................................................... 83
  4.8.1. Adjusting playback effects ....................................................................................... 83
  4.8.2. Playback editor ........................................................................................................ 83
1. Introduction

MagicScore automates recording scores for several instruments simultaneously - even for an entire orchestra - and plays back the music created.

**Functions:**

- Automatically corrects the inputs.
- Allows highly versatile editing (copies, inserts, deletes, and transposes both individual notes and selected blocks of notes).
- Provides note entry through a virtual piano.
- Includes a descriptive chord builder.
- Anchors comments, references and other design elements to all units of the score.
- Sets alignment, offset and break size of staves and measures.
- Regulates volume, balance and effects for each individual track and instrument.
- Reads and writes MIDI files and records in MIDI format.
- Plays back instruments separately or as the entire ensemble.
- Prints scores with print previews.
- Supports Drag & Drop.
- Allows Undo and Redo.
- Records scores through MIDI devices.
- Exports scores as graphics (GIF, JPEG, BMP).
- Manages orientation of the text on the sheet (displays the text at any angle).
- Calculates the volume of the notes based on dynamics symbols on the music staff.
- Calculates playing of the effects (Arpeggio, Gruppetto, Vorschlag, Trillare) based on symbols on the staff.
- Includes a playback editor for changing starting time and duration of notes.
- Saves chord templates inside the program or in an external file for reuse and sharing with others.
- Includes an upgradeable list of the music terms.
- Allows adding chords using a virtual guitar.

The unregistered version limits the amount of data that may be input into scores.

**Home page:** [http://www.musicaleditor.com](http://www.musicaleditor.com)

**Support:** [http://www.dgalaxy.net/support.php](http://www.dgalaxy.net/support.php)

**Email:** support@dgalaxy.net

**ICQ:** 48678022

**Phone:** +380-642-62-43-96
            +380-050-470-31-04 (GMT+2)
2. System requirements

Windows 95/98/NT4.0/2000.

**Minimum requirements:**

- CPU Pentium -100 Mhz
- RAM - 16 Mb
- HDD - 20 Mb
- SVGA 800x600x256

**Recommended:**

- CPU Pentium MMX -166 Mhz
- RAM - 32 Mb
- HDD - 40 Mb
- SVGA 800x600xHi-color
3. Working with the program

3.1. User interface

Main menu

Contains commands for working with files, the clipboard, score management, recording, playback and navigation.

Management tools

Duplicates main menu commands for quick access.

Project window

Lists part systems and voices of each staff in the score. Allows entry of names, MIDI instruments (for parts or voices), channel numbers and muting of parts or voices.

Music items, editing tools and information entry

Contains groups of buttons for note, symbol and expression entries, a virtual piano, virtual guitar harmonies, tools for editing the staff and its symbols, and a navigator for the score.

Any panel could be represented as a separate window. Select needed one and press button. You can turn panels on and off in «Windows» or «Tools» or on control tool panel.
3.2. Display principles

The score's data are stored in a special MagicScore file. You can work with several files simultaneously. You can import scores from MIDI files; the MIDI format is converted into the internal format and can be saved as a MagicScore file or exported back into MIDI format.

The score can have multiple sections each using a different instrument set.

Part properties include name, MIDI instrument (for playback choose from the instrument list), channel number, and mute switch. You can create a part using the command «Add part». Time signatures extend to all parts.

You can write a part on one or more staves and give each staff several voices. You can assign each voice a MIDI instrument, channel number and mute switch. If the MIDI instrument is not set, playback of the voice will use the properties of the part as a whole.

A document may have an unlimited number of pages. (Pages are added automatically when data entered exceeds the current number.) The clef is set for all staves and time signatures are set for all parts. You can change them in any measure.

Positions of the notes in the measure are set automatically according document properties. Notes less then 1/4 duration are automatically beamed across half or whole measures depending on setup. See «Document properties».

Empty portions of measures fill automatically with rests when notes are added or deleted. Notes may follow a specifically added rest. When you delete such notes, the rests following it are recalculated.

The «Slur» («Liga») symbol creates ties and slurs within a staff or across staves. You may change the beginning and ending positions of ties and slurs as well as the shape of their curves.

The «Tremolo», «Flat» («Bemol»), «Double-Flat», «Sharp» («Diesis»), «Double-Sharp», «Natural-Flat» («Beccare-Bemol»), «Natural-Sharp» («Beccare-Diesis»), «Natural» («Beccare»), «Lift», «Glissando», «Fall» symbols attach to notes. They are copied and deleted together with these notes and displayed near the notes in the score. You can change their position relative to these notes.

The «Staccato», «Portamento», «Tempo», «Forte».. «Piano», «Accent» («Accentus»), «Arpeggio», «Trill» («Trillare»), «Gruppendo», «Mordent», «Fermata», «Press pedal» and «Release pedal» symbols attach to particular measure positions. They are displayed in the score according to their measure positions. You may adjust them within the measure or move them to another measure entirely. You can also change the beginning and ending position of other symbols: «Ottava up» («Ottava alta»), «Ottava down» («Ottava bassa»), «Crescendo», «Diminuendo», «Bracket».

The «End of part», «End of composition», «Begin repeat», «End repeat», «Fonar», «Da capo», «Dal segno», and «Section» symbols are attached to particular measures. You can move these vertically within the measure or to another measure entirely.
The «Volta» symbol defines sections of the composition and has a duration measured in measures. You may change this parameter. Playback takes these numbers into account when playing from the command bar.

The «Rehearsal mark» symbol places rehearsal marks in the parts beginning with "A" and continuing alphabetically.

The «Grace notes»(«Vorschlag») symbol attaches grace notes to a position in the measure. They appear in the score near the note, either ahead of or behind it. See «Grace note properties»

See «Editing notes and symbols» and «Hot keys».
3.3. Main menu

«File» - Program and file commands

- «New» - Create new score.
- «Open» - Open a MagicScore file or import a MIDI file.
- «Reopen» - Choose from a list of recently opened files.
- «Close» - Close active window with score.
- «Close all» - Close all windows with scores.
- «Save» - Save the active score to file.
- «Save as» - Save the active score to differently named MagicScore file or export as a MIDI file.
- «Mail To» - Send an email message with the current file attached.
- «Export» - Export the active score as a graphic (GIF, JPEG, BMP).
- «Print» - Print the active score.
- «Preview» - Preview the active score before printing.

«Edit» - Editing commands

- «Undo» - Cancel the last operation.
- «Redo» - Repeat the last operation.
- «Select staff symbols» - Select all notes and symbols in an active part, staff or voice.
- «Select design units» - Select design elements.
- «Cut» - Copy selected notes and symbols to clipboard and delete them from the score.
- «Copy» - Copy selected notes and symbols to clipboard.
- «Paste» - Insert notes and symbols from clipboard into the current position.
- «Special paste» - Insert notes and symbols from clipboard into the current position of the active staff or voice (use if you need to move notes to another staff or voice).
- «Delete» - Delete selected items from a score.

«Document» - commands and set-up

- «Document properties» - Set document properties.
- «Add composition» - Add a composition to the active document.
- «Delete composition» - Delete a composition from the active document.
- «Composition properties» - Set composition properties in the active document.
- «Add part» - Add a part to the active composition.
- «Delete part» - Delete a part from the active composition.
- «Part properties» - Set part properties in the active part.
- «Add staff» - Add a staff to the active part.
- «Delete staff» - Delete a staff from the active part.
- «Staff properties» - Set staff properties in the active part.
- «Add voice» - Add a new voice in active staff.
- «Delete voice» - Delete the active voice in the active staff.
- «Voice properties» - Set active voice properties in the active staff.

«Format» - Symbol and Staff Management

- «Symbols» - Symbols.
  o «Stem up» - Set the stem direction of selected note(s) to up.
o «Stem down» - Set the stem direction of selected note(s) to down.
o «Change stem length» - Change the stem length of selected note(s).
o «Beam notes» - Beam selected notes of less than 1/4 duration.
o «Unbeam notes» - Unbeam selected notes of less than 1/4 duration.
o «Split notes to pair» - Split selected notes into a pair of equal duration with each value being half the original.
o «Join pair of notes» - Combine two selected notes of equal duration into one.
o «Horizontal align» - Align staff symbols/design elements horizontally with the first symbol selected.
o «Vertical align» - Align staff symbols/design elements vertically with the first symbol selected.

• «Layout» - Layout.
o «Space before note» - Change space before the note.
o «Space after measure» - Change empty space after the measure.
o «Default space» - Set the space to the default value.
o «Top offset of staff» - Change top staff offset.
o «Left offset of staff» - Change left staff offset.
o «Right offset of staff» - Change right staff offset.
o «Default offset» - Set the offset to the default value.
o «Set align measures horizontally» - Set horizontal alignment of measures to sheet.
o «Reset align measures horizontally» - Reset horizontal alignment of measures to sheet.
o «Set align staves vertically» - Set vertical alignment of staves to sheet.
o «Reset align staves vertically» - Reset vertical alignment of staves to sheet.
o «Default position» - Set selected staff symbols to the default position.

• «Breaks» - Breaks.
o «Add staff break» - Add break to next staff.
o «Delete staff break» - Remove break to next staff.
o «Add page break» - Add break to next page.
o «Delete page break» - Remove break to next page.

«Tools» - Commands for playing, recording and zooming.

• «Play» - Start playback from current position in the active score.
• «Stop» - Stop playback or recording.
• «Record» - Start recording from MIDI device at the current position in the active score.
• «Go to begin» - Set the current position of the active score to the beginning of the composition.
• «Go to end» - Set the current position of the active score to the end of the composition.
• «Zoom in» - Zoom in on the active score by 10%.
• «Zoom out» - Zoom out from the active score by 10%.
• «Actual size» - Set scale to 100%.

«Templates» - Commands for management of user symbols, chords, etc.

• «Symbols» - Manage the saving and list of user symbols.
• «Expressions» - Manage the settings and list of user expressions.
• «Chords» - Manage the saving and list of user chords.
- «Drum map» - Set the map for drum note translation.
- «Guitar list» - Manage the list of user guitars.
- «Transpositions» - Manage the list of user transpositions.
- «Instruments» - Manage the list of user instruments.
- «Tones» - Manage the list of user tones.
- «Devices» - Create virtual output devices.

«Service» - Program options.

- «Settings» - Set devices and record mode
3.4. Data entry

3.4.1. Creating a new document

Click to create a new document. The new documents window will open where you can set the general properties of the score. You can also choose to work from a template. You can create your own templates using the "Save" button.

The fields «Title» and «Author» define the title (text displays in a large font at the top of the page) and author's name (text displays on the right side of the page). Later you can change the title and author's name and properties using the panel. See «Text properties».

«Create title page» - in this case the first page of the score will remain empty, automatically composition title, author and poet names are added.

«Add part names» - part names are recorded automatically before the first system staves, before further system staves short names are recorded.

The field in «Time Signature» sets the time signature of the composition. If a measure's Time Signature is not set (a check box is not set up) the program allows adding any number of notes in the measure.

The fields in «Upbeat» sets the time signature of the first measure if it is different from the time signature of the rest of the composition. You can change this setting in «Document properties» and «Composition properties».

The project area shows the active elements that will be used in your composition. You may change the number of active elements using the and buttons. (If a «Part» is active, you can change the number of a parts in the composition.) You can assign each element its own name, key signature or clef.

You can also select instruments from a predefined list of instruments by pressing the button. (See «Orchestral Instruments».)

The basic settings of the score are located on the «General» panel.

The settings of the score layout are located on the «Page» panel.
3.4.2. Orchestral instruments

Pressing the button allows you to add orchestral instruments to your score by selecting them from a list. Use the, , and buttons to control the list of added instruments.

If you add instruments in a non-standard order, you can regroup them according to the groups defined in the instrument description (using the button) and sort them according to the order also defined in the instrument description (using the button).

You can modify the list of instruments as well as their properties (key, transposition, number of staves, etc.) from the main menu: «Templates» | «Instrument List».

See «Creating a new document». 
3.4.3. Adding notes and symbols

To add notes and symbols press the appropriate button after selecting the (notes) or (symbols) panel and then use the mouse to insert it into the desired position in the score. To attach «Slur»(«Liga») | «Natural»(«Beccare») ¤, and so on, press the corresponding button on the panel and then click the mouse on the desired note. (For «Slur»(«Liga») ¤, press the note, then release mouse button or drag to the desired position.) If you are entering notes or rests, you can change the duration of the added note or rest through the context menu or by pressing keys 0 through 6.

If the program is in «Insert» mode (activated by the «Insert» key), notes and rests that follow the added note will shift to the end of the measure, and if they are out of the measure they are deleted.

Chords can be added only in the «Insert» mode (activated by the «Insert» key) or if you press the «Chord» button ( «Notes» panel).

Notes can be added with symbols such as «Natural»(«Beccare») ¤, «Staccato» *, «Portamento» —, etc., by selecting both a note button and a symbol button.

Use the «Erase» button to delete notes and symbols. Press this button and then click the symbol you wish to delete on the staff.

The «Single input» | «Multiple input» | «Quick input» button switches the data entry mode. In «Single input» mode, after adding a note or symbol, the program reverts to selection mode. In «Multiple input» mode, you can continue adding the selected note or symbol. (The «Point» button need not be pressed.) In «Quick input» mode, the program adds a note or symbol as soon as you click a note or symbol button in the current position of the score.

If you press the button while adding a note, the note becomes a «Duplet», «Triplet», etc. If the position and duration of the «Triplet» (or other subdivision) exceeds the current time signature, the addition is ignored.

It is important to remember that the program automatically fills the measure with rests and new notes overwrite the rests. No need to remove rests to add new notes. If you need to have a completely empty measure you can hide rests by «Edit» | «Hide/Show rests» command.

You can also add notes using the, External MIDI device (MIDI keyboard) or «Hot keys». 
3.4.4. Adding expressions

(This feature is available only in the «Maestro» version.)

Tools for working with expressions are located on the «Expression» panel. You can change the font used to display an expression by pressing the «Font» button. A dialog for setting font parameters opens.

If the list of expressions exceeds the size of the bookmark, pressing «All Expressions» on the bookmark button reveals the entire list of available expressions. The expression you choose will be added to the beginning of the bookmark list.

Expressions are added to the staff as text, which can be changed as needed.

If you want to add new expressions, choose the main menu item «Templates» | «Expressions» | «List». This opens a window allowing you to add, delete or change expression parameters.

See. «Expressions». 
3.4.5. Adding chords

(This feature is available only in the «Classic» and «Maestro» version.)

Tools for working with chords are located on the \(C_m\) panel. Chords are added at the cursor position in the score.

First choose the root note of the chord to add - flat (bemol) \(b\) or sharp (diesis) \(\sharp\), and optionally specify whether it will be a major \(M\) or minor \(m\) chord.

The \(5\) \(\rightarrow\) buttons assign the 5th to 13th notes of the chord to be played. Flats (bemol) or sharps (diesis) for the 5th, 7th, 9th, 11th or 13th notes are set using the \(5+\) \(\nearrow\) buttons.

To delete a chord, first select it in the score and then press the \(\times\) button on the left side of the chords panel.

The right panel has template buttons for the most common musical chords (template \(\times m\) - major, \(\times 7\) - seventh, etc.). To use templates, press the root note of a chord and then the template button.

You can also create your own chords templates. Create a chord (2 notes or more) on the staff as usual. Select all the notes of the chord and save it using the \(\square\) button on the \(C_m\) panel or from the main menu («Templates» | «Chords» | «Save»). Chords thus saved will appear on the \(C_m\) panel. If the full list of chord patterns exceeds the size of the chords panel, you can view them all by pressing the «All chords» button on the \(C_m\) panel. Any chords you choose will be added to the beginning of the list on the \(C_m\) panel.

To save chords you have created to a file, choose «Templates» | «Chords» | «Save» from the main menu.

To add a saved chord to a score from a file, choose «Templates» | «Chords» | «Add» from the main menu.

See. «Chords».
3.4.6. Adding design elements

Tools for working with design elements are located on the panel.

«Lyrics» are attached to the current staff position.

All other elements are attached to the page number and can be duplicated on all pages. Duplication properties can be set in text and image properties, or using the «On all pages» and «On one page» buttons (after you select the desired elements).

Buttons on the bookmark manage the text and line properties, as well as the fill pattern and its styles such as the «Fill color» and others. (Select the property you want to use before selecting items to be edited.)

You can also set text orientation with the «Orientation» button and alignment with the «Left align», «Right align» and «Align center» buttons.

Also you have the opportunity to change the position of design elements. For this there are the «Bring to front» and «Send to back» commands. When you select the «Send to back» command the element will appear under the staves and when you select the «Bring to front» command, it will appear over the staves.
3.4.7. Intervals Input

The intervals panel allows you to add the next note a specified interval apart from the previous note.

Before adding a note, set the following parameters:
- the cursor mode (whether to move after adding a note or not, using the "Chord" button);
- the direction of the interval (whether the interval moves higher or lower, using the "Higher" and "Lower" buttons respectively);
- the duration of the note (using the arrow of the "Duration" button to select from a list, or by pressing this button continuously to change to the next duration on the list);
- the number of octaves to add to the interval.

You can also add a trill or a tremolo to the note or increase the duration by a dot or a double dot.

When you press the button for the desired interval, the note is added in the current position based on the parameters you set.

See «Hot keys».
3.4.8. Adding notes with the virtual piano

This tool is on the panel. The keys of the virtual piano correspond to regular piano keys.

The duration of the added note depends on the position of the mouse cursor on the height above the piano keys. You can see this duration changing on the mouse cursor.

Notes are added at the current position of the score, and if you have not pressed, the cursor moves to a new position according to the duration of the added note or rest. You may add notes from whole notes through 1/64 by moving up or down a given piano key and adjust octaves by using the scroll buttons. Use the addition buttons to switch between addition of notes and rests. Use the "Dot", "Tremolo", and other symbol buttons to attach the selected symbols to the notes added.

Move through the score using the scroll keys while inputting data through the virtual piano.

See «Hot keys».
3.4.9. Adding notes with the virtual guitar

(This feature is available only in the «Maestro» version).

This tool is located on the panel.

The location of frets on the virtual guitar corresponds to frets on a real guitar. You can add chords by frets for many types of predefined guitars (See "Templates" | "Guitars"), using the switch button «Guitar kind». The list of the guitars is available for modification in «Templates» | «Guitar list».

You can set the duration of the added chord using the «Duration» button.

Chords are added in the current position on the staff; any existing data in this position will be deleted.

See «Hot keys».
3.4.10. Keyboard entry

Entry panel has buttons correspondent to computer keyboard.

You can work with notes of three octaves in the same time. Use \( \text{\textendash} \), \( \text{\textendash} \) buttons for shifting octaves.

\( \text{\textendash} \), \( \text{\textendash} \) buttons are toggle buttons which add notes with the correspondent accidentals.

Each button has a tooltip with referring to correspondent keyboard key.

Duration of new notes is specified by \( \text{\textendash} \), \( \text{\textendash} \) buttons.

See. «Hot keys». 
3.4.11. Input through MIDI device (MIDI keyboard)

To input notes through external MIDI device, you need to plug it in with the computer, select device in program settings: «Service» | «Settings» | «Devices» | «Input», set it into necessary place of the composition and press button on the toolbar.

Input settings are assigned on toolbar «Record MIDI», which appears after «Record MIDI» start or in the window «Service» | «Settings» | «Record/Play».

Notes addition is performed in 2 modes:

- Step by step mode (by default), after adding the note cursor position is shifted by duration of the note added, if the chord addition mode is not set up (button).
- Real-time mode, cursor of the score moves according to the tempo set up in the composition.

See also «Record of music», «Hot keys». 
3.4.12. Editing notes and symbols

You can change the parameters of added notes and symbols. Select notes or symbols with the help of the lasso or by holding the Alt key and clicking the mouse.

You can move all notes and symbols up or down, to the right or left, within the limits of the measure, and you can adjust the length of some characters, such as «Crescendo», using the panel or with keystrokes. (See «Hot keys».) You can use Drag&Drop to move symbols and notes. You can select multiple items while holding the Ctrl key and drag and drop them as a group.

If you hold the Alt key and click on a symbol of the score, the program will select all of the same symbols that belong to one line of the score (for example: an entire line of lyrics or chord texts).

If you hold the Ctrl key and click the symbols of the score the program adds (or removes if this symbol has already been selected) this symbol to selected list.

You can align selected symbols horizontally by the «Horizontal align» command or vertically by the «Vertical align» command («Modify» panel).

You can edit text or lyrics using a double mouse click. (This activates the score editor.)

A context menu is available for many score items (text, image, grace notes, etc.)

You can copy notes and symbols to the Windows clipboard.

You can cancel all changes using the «Undo» command. If the «Undo» command produces undesirable results, the «Redo» command will restore the original state of the score.
3.4.13. Measure and page numeration of the composition

Measure number - symbol added to the first numbered measure and repeated in further measures till the end of the part, according to numeration parameters. To add the symbol click on panel. Numeration parameters («On every measure» .. «On every 10th measure», and the border) are set up in «Measure numeration» window. To turn on "Measure numeration" window click the arrow of button on panel. After changing numeration parameters, measure number should be added again into the first numerable measure.

Page number - symbol added into the first page of the document and repeated till the end of the document according to numeration parameters. To add the symbol click on panel. Numeration parameters (alignment and appearance) are set up in «Number style» window, which is turned on by clicking arrow of button (panel). After changing numeration parameters page number should be added again into the first page.
3.4.14. Hide empty staves

The program allows hiding staves which have not any music data. This is a special change case of staves when they are hidden if there are not any data in them. These staves are indicated in grey on the project tree.

Set a cursor on the selected line and choose the menu point «Document» | «Staff» | «Hide empty staves». Select the staves to be hidden in the opened window and press the «Ok» button. In this case only empty staves will be hidden. The rest of staves will be hidden too if all data are deleted in them.

Do «Document» | «Staff» | «Show empty staves» to undo this change case.
3.5. Element properties

3.5.1. Document properties

Set the score's parameters.

«General» - General properties of the score.

- «Staff interval» - Sets the interval (in the page metric) between staves on the page for all document.
- «Scale» - Sets the scale (from 50% to 200%) of the data on the sheet. (Used when printing or exporting to graphic formats.)
- «Note spacing» - Styles of the notes filling in the measures. "Evenly" – The space occupied by a note within a measure depends on the size and amount of graphical images. "Proportional" – The space occupied by a note within a measure depends on its duration. "Positional" - The staff is evenly divided by the number of measures and the position of the notes is set accordingly. "Space between notes" - Increases/decreases the space between notes. The default is 2 pixels. These settings are used for the entire document, but you can set them for each staff separately «Setting measure alignment style.»
- «Beaming note style» - specifies the way notes in the measure are beamed together. Options include:
  - no beams;
  - beam all notes in the measure in one group;
  - beam notes according to time signature;
  - custom beaming.

By default, these settings are used for the entire document, but you can set them for each measure separately «Setting the style for beaming notes»

- «Alignment» - Sets the horizontal alignment of measures and the vertical alignment of staves on a sheet.
- «Use Key Signature for grace notes» - while playing grace-notes the part's key must be considered.
- «Empty pages at beginning» - Specifies the number of blank pages at the beginning of a document. You can add text, pictures and other design elements to such pages.

«Page» - Sets up the score for the printer.

- «Metric» - Sets measurement of the page to millimeters, inches, or pixels.
- «Paper size» - Sets the printer paper orientation and dimensions to any of 26 predefined formats. Allows the user to define other exact dimensions by preselecting Custom from the dropdown list box.
- «Margin» - Sets the left, right, top and bottom margins of the page in millimeters, inches or pixels.

«Print settings» - Parameters for printing
• «Print empty lines at end of composition» - If not selected, printing stops when data stops.
• «Print empty measures at end of composition» - If the previous option is selected, this option allows you to also print the empty measures at the end of the piece.
• «Print numbers of measure» - If not selected, measure numbers are not printed.

«Drum map» - Map of a composition. (Used to translate drum notes to MIDI events.)

«Signature» - You can specify the author, poet (lyricist), and copyright of the document. You can also provide a description of the piece.
3.5.2. Section properties

Section settings.

- **«Name»** - section title, the title is not marked in the score, but used to name the parts in project tree.
- **«Tempo»** - section tempo by default, i.e. used in the beginning of the composition till music symbols or terms in the score, which change the composition tempo.
- **«Pick-up (Ubeat)»** - pick-up (ubeat) with time signature different from the common time signature, if not marked, then its time signature is equal to the common time signature.
- **«JazzSwing»** - playback style where first note increases and the second decreases.
3.5.3. Part properties

Set the part parameters.

- **«Name»** - Name of the part used in the project tree.
- **«Timbre»** - Default MIDI patch used for playback if not specified for voices of this part.
- **«Transposition»** - Interval between notation and real pitches during playback.
- **«Channel»** - MIDI channel assigned to this part and used during playback.
- **«Volume»** - Volume of the MIDI channel assigned to this part.
- **«Pan»** - Pan of the MIDI channel assigned to this part.
- **«Mute»** - Mutes this part during playback.
- **«Staff interval»** - Sets the interval (in the page metric) between staves on the page for this part, if not mark, the interval from document properties is used.
- **«Visible»** - Visible or hidden part in the score.
3.5.4. Staff properties

Set the staff parameters.

- **«Scale»** - Specifies the scaling of the staff and its symbols. Available options:
  - **«Normal»** - Same scale as for the whole score.
  - **«Small»** - The staff and its symbols are reduced by 50%.
  - **«Custom»** - Select a percentage from 50% through 150%.
- **«Line count»** - Number of lines that will appear on each staff.
- **«Mute»** - Mutes this staff during playback.
- **«Tablature»** - Check this to display the staff and its notes as a tablature.
  - **«Fret count»** - Number of frets on the instrument's fret board. (Used during note entry.)
  - **«Show duration»** - Set this to display stems and circular note heads for quarters and halves.
  - **«Tuning»** - Specifies the pitch of every string.
  - **«Guitars»** - Select a predefined instrument from a list.
3.5.5 Voice properties

Voice settings.

- **«Timbre»** - if set up, all notes of the voice are played at this timbre, otherwise at timbre set up in the part.
- **«Channel»** - MIDI channel assigned to this voice and used during playback.
- **«Volume»** - Volume of the MIDI channel assigned to this voice.
- **«Pan»** - Pan of the MIDI channel assigned to this voice.
- **«Mute»** - Mutes this part during playback.
- **«Visible»** - Visible or hidden part in the staff.
- **«Place in 2 staves»** - if set up, the voice is placed in 2 adjacent staves and you can enter notes of this voice in upper and down staff, note and rest order considers it as one voice.
3.5.6. Measure properties

Set measure parameters.

- **«Time Signature»** - Specifies the real duration of the measure if it is different from what is displayed in the time signature.
- **«Staff break»** - Check this box if you want the next measure to appear on a new line.
- **«Page break»** - Check this box if you want the next measure to appear on a new page. “Empty pages after break” specifies the number of pages without music after this measure where you can add text, pictures or other design elements.
- **«Beaming note style»** - specifies the way notes in the measure are beamed together. Options include:
  - no beams;
  - beam all notes in the measure in one group;
  - beam notes according to time signature;
  - custom beaming.

By default, these settings are used for each measure separately «Setting the style for beaming notes»
3.5.7. Grace note properties

Customizes grace note parameters. Grace notes are attached to the staff position, before or after the note, and may consist of several notes.

- «Place» - Placement of grace note(s) before or after the main note.
- «Style» - Short or long grace note(s).
- «Duration» - The real duration of grace note(s) sound.
- «Note spacing» - space between notes displayed in the part.
- «Slur» - when adding a grace note into score slur is also added which connects the grace note with the main one.
- «Duration» - the real duration or length of the grace notes on playback.
3.5.8. Text properties

Set text parameters.

«Name» - Select a font name from a list of fonts.

«Music» - Show/hide a panel for text input using music symbols.

«Size» - Select font size.

«Style» - Select bold, italic, strikeout and underline.

«Continue» - This is normally needed for lyrics. It allows syllables to be assigned to more than one melody note. A dash is placed under notes as needed.

You can change additional parameters, such as «Color», «Alignment» and «Orientation» with the panel after selecting some text.

See also <Document properties>
3.5.9. Instrument properties

The following properties of any orchestral instrument are used when adding an instrument to the score in the new document window. (See «Create a new document»)

- **Name** - The name of the instrument being added to the score.
- **Abbr.** - The abbreviated name of the instrument being added on the next staff of the score.
- **Group** - The name of the musical group to which the instrument belongs.
- **Order** - The order of the instrument in the group. (This is used if sorting is active when adding an instrument.)
- **Timbre** - The number of the MIDI instrument, which is selected from a predefined list.
- **Transposition** - Transposes the notes of an instrument during playback. You can select the transposition parameter from the list located in the main menu: «Templates» | «Transposition».
- **Line count** - The number of lines on a staff.
- **Accolade** - The type of bracket for the chosen instrument. There are three options for adding brackets to the staves:
  - "None" - No bracket is added to the staff of this instrument.
  - "One Instrument Only" - The bracket connects the staves of the given instrument only.
  - "For the Group" - The bracket connects the staves of the entire group of instruments.
- **Staff count** - The number of staves used by the instrument.
- **Clef** - The clef of each instrument displayed next to its staff.

See also <Creating a new document>
3.5.10. Guitar properties

Guitar templates.

- «String count» - of the instrument.
- «Fret count» - of the instrument.
- «Timbre» - MIDI keyboard patch or voice being played by the instrument.
- «Transposition» - interval between notation and real sound of the transposing instrument.
- «Tuning» - pitch settings for strings of the instrument.
- «Second pair» - specifies doubling of notes of the instrument (as for 12 string guitar). If set, entering from guitar fretboard adds two notes at a time.
- «Chords» - list of chords for the instrument. Used when adding guitar fretboards from the \texttt{C.m} tab.

See. «Guitar list». 
3.5.11. Font list

Set up extended music fonts.

- «Name» - a name of a font set in operational system.
- «Scale» - is used if set-in font and selected font have different size.
- «Beam interval» - is used in pictures of 1/16 notes and shorter ones when the interval between their beams should differ from the interval set on default, e.g. if the beams are too bold.

See «Fonts»
3.6. **Templates**

3.6.1. **Symbols**

Program has a possibility to draw and use new symbols (like already defined). You can attach some action to them (Dynamics, Repeats:) after adding them to the score (this option is available in context menu when the symbol is selected).

In order to create a symbol you need to draw it on a sheet by mean of \[\text{panel}\], select all the elements and press \[\text{button}\] of \[\text{panel}\] or use \[«Templates» | «Symbols» | «Save» menu command.\] In the displayed dialog you should specify the name, group and filename for this symbol. Program adds saved symbol to its list of symbols and after that it is available on \[\text{panel}\].

\[«Templates» | «Symbols» | «Save as..» menu command doesn't add this symbol to the program and is used for giving the symbol to other users.\]
3.6.2. Expressions

The list of music expressions available for quick entry or for some actions. It is available in «Templates» | «Expressions» | «Expression list». Each expression belongs to some type. You can specify its type in the same menu:

- «Text» - simple text without any action
- «Dynamic» - affects the volume of notes in the position where it is attached
- «Tempo» - affects the tempo when added to the part
- «MIDI events» - executes attached MIDI sequence
- «Repeat» - moves the cursor during playback.

You can pick expressions from the panel which provides the most often used expressions. The whole list is available by arrow on the panel.

See «Adding expressions». 
3.6.3. Chords

The program allows to create chord templates for quick entry. List of chords is available through «Templates» | «Chords» | «Chord List».

In order to create a new chord you need to add its notes to any place in the score (at least two notes) select them and click 💼 button panel (or by «Templates» | «Chords» | «Save»). Chord dialog pops up. Specify Name (you can enter it by separate elements by using «New» button and arrow buttons), Group and file name for chord description. Saved chord becomes available in program’s chord list and shown on panel.

«Template» | «Chords» | «Save as...» command doesn't add chord to program but used to save chord for other users.

See. «Adding chords». 
3.6.4. Drum map

Used to map drum notes to MIDI events according to their staff positions. Available with «Templates» | «Drum map» command.

Notehead shape and its staff position is analyzed for mapping. Mapping is copied to each new document and document's own copy is used during playback.

Mapping is done if staff uses percussion clef and MIDI Chanel #9.

See. «Drum notes».
3.6.5. Guitar list

It is used for tuning the instrument of \[\text{panel}\] and for defining staff in Tablature view («Staff properties»). You can change it in «Templates» | «Guitar list».

The information about guitar includes number of strings and frets, timbre (MIDI patch), transposition (according transposition list) and tuning for strings of this instrument.

You can also define list of chords used with this instrument. This list will be available when adding information through \[\text{panel}\].

See. «Adding notes with the virtual guitar», «Guitar properties». 
3.6.6. Transposing

List of intervals for transposing is available in «Templates» | «Transposing» menu.

Interval is specified in half-tones. So the value is the amount of half-tones between original and transposed pitch.

Used in part properties («Document» | «Part» | «Part properties»). If transposition is specified then all the pitches are modified during playback.

This transposition list can be also used for transposing notes by buttons on panel (arrows on the buttons)

See «Transpose»
3.6.7. Instruments

It is used for defining musical instruments in new composition (button), section or part. Program offers possibility to choose instruments from list, where each instrument already has predefined parameters (Timbre, Name, Clef, Key, and Transposition).

This list could be modified in «Templates» | «Instruments» menu.

See. «Create a new document», and «Instrument properties».
3.6.8. Key signature

Program has a list of predefined key signatures and provides you possibility to create your own by using list of templates «Templates» | «Key signatures».

You need to specify name and define the scale on staff. List is available for usage in Key Signature window (panel, arrow on button).

See «Adding notes and symbols»
3.6.9. Devices

Describes the list of additional output sound devices, further this device can be chosen in the window «Service» | «Settings» | «Devices» | «Output».

The device uses Bass library. Playback uses sample libraries- music fonts.

Create device (Add button) assign the name.

Further this name is used in the list of output devices in «Service» | «Settings» | «Devices».

Then add Sound fonts (button). Every font supports one or several timbres.

If sound font supports all timbres, value for the timbre-1 should be assigned for the sound font, otherwise, the number which you use in the program further on for the output of certain parts and voices, better according to MIDI standard.

File - File path, containing sound fonts.

Further in the program the timbres for the parts and voices are selected from the timbres list of described device (if it's selected in «Settings») or according to MIDI standard.

See «Program settings».
Space between staves is specified in «Staff interval» property of «General» tab of «Document properties» dialog («Document» menu). You can also align staves vertically by pressing D button on score «Rules» by ,  buttons of panel. Program can change these values when vertical respacing of staves is performed.

Spacing between notes is specified in «Note Spacing» box of «General» tab in «Document properties» dialog («Document» menu). The value is used if note spacing is set to «Evenly». When set to «Proportionally» note spacing depends of their duration. If «Position» note spacing is set then program calculates the whole amount of beats per page divides that by number of lines and then arranges notes according to beats. You can also change the space between notes by D button of score «Ruler» or by , buttons of panel. When measures are justified note spacing could differ from default.

You can add a gap (i.e. empty space) between measures by button of score «Ruler» or by buttons of panel.

By default each staff is justified between left and right page margins (see. «Document» | «Document properties» | «Page»). You can adjust left or right indent of staff by button on score «Ruler» or by buttons of panel.

You can set spacing between clefs, key and time signatures (by default it is set to 0) in «Document properties» dialog («Document» menu) in «Layout» tabs.

By default program aligns staves according to page width and height. This is specified in «Document properties» («Document» menu) «General» tab. You can also set this alignment for any staff ( panel button) and for any page ( panel button), if general alignment is off. Set cursor into proper position and press this button.

You can also set text alignment in the score ( panel buttons). Specified alignment is valid for the rectangle filled with text. In order to change it you need to select the text and press one of the buttons.

You can also align symbols or lyrics vertically or horizontally by buttons of panel. Select needed symbols (by holding Alt key and clicking one of symbols you can select all symbols of the same type in one line, for example all lyrics).
3.9. Program settings

Commands to change file, playback and recording parameters. On the Main Menu under «Service».

- «General» - For file parameters.
  - «Save»
    - «Save backup» - Creates a new backup copy when a file is saved. Existing backups are not overwritten.
    - «Count» Limits the number of backup copies saved to the designated number and deletes the oldest copy beyond this number.
    - «Autosave» - Automatically saves changed files at designated intervals.
    - «Interval» - Sets the interval for automatic saving of files.
  - «Effects»
    - «Playback when entered» - hear a note when you enter it using the "Notes" panel.
    - «Playback on drag note» - hear note when you it draggin.
    - «Playback for Piano input» - hear a note when you enter it using the "Piano".
    - «Playback for Guitar input» - hear a note when you enter it using the "Guitar".
    - «Playback for MIDI input» - hear a note when you enter it using your MIDI device.
    - «Show note pitch tip when enter» - pops up the note name at the mouse cursor.
    - «Highlight played note on Piano board» - highlights played notes on the Piano board during score playback.
    - «Show playback» - sets the color of notes' illumination while playing.
    - «Cursor blink» - Set up or cancel cursor blink in the score.
  - «Autocalculate»
    - «Measure Auto filling» - filling the empty part of measure with rests according to measure duration.
    - «Auto Playback of Effect Symbols» - if selected, correct playback of effect symbols (e.g. trill, grappett, mordent) will be defined as they are entered.
    - «Auto Playback of Dynamics Symbols» - if selected, correct playback of dynamics symbols (e.g. forte, crescendo) will be defined as they are entered.
- «Devices» - selects the current output and input devices.
- «Record/Playback» - sets the quantization mode when recording notes from an input device; in other words, the minimum size of notes recorded. Also defines settings for the metronome used for recording and playback.
«Real time» - if set then cursor is moving along the score according to tempo otherwise it is moved only after adding a note (if Chord mode is off).

«Rounded/exact playback» - if set then note duration during playback will be set according quantization settings. Otherwise real duration is kept for each note and used in playback.

«Default velocity» - if it is set then program is using this value when storing MIDI input instead of the real one received from MIDI device.

«Metronome» - assigns metronome settings for playback, record or special instrument "Metronome".
   «When record» - Set up or cancel metronome playback while record from external MIDI device.
   «When play» - Set up or cancel metronome playback while score play.
   «Duration» - metronome note duration.
   «First velocity» - Influence on first note sound in the measure, by default its sound is higher.
   «Channel and timbre» - Assign sound for MIDI to play the first note in metronome.
   For further notes in the measure (their quantity depends upon measure size) the same parameters are assigned.

• «Music» - settings of displaying note names, harmonics, dynamics, and effects, direction of guitar fretboards and tablature styles.
   «Notes» - note names used for display in program. Two predefined sets could be used or new names could be added manually.
   «Dynamics» - settings for volume calculation. When dynamics symbol is occurred these settings are used to adjust current note or symbol value and could be edited in Note Volume Editor.
   «Effects» - settings for musical effects calculation. When correspondent symbol is occurred these settings are used for changing in the current position of note or symbol. In Playback editor you can adjust allocation of this effects in timescale.
   «Fretboards direction» - the way guitar fretboards are displayed in the score.
   «Tablature style » - the style of displaying note flags on tablature staff.

• «Position» - while adding the symbols to the note (when the symbol is chosen from "Notes" or "Symbols" panel and added to the note) the offsets define the symbols place related to the variable set up by default. In other words those variables can be set up in the case when you want to change symbols place related to the note set up by the program.
3.10. Playback

The program plays back music from the score. Playback begins from the current position in the score in the tempo defined by the settings or as changed in the score. The program monitors the current playback position and sets the cursor appropriately on the score, switching pages when necessary. Playback begins when you click the "Play" button and stops when you click the "Stop" button, or upon reaching the end of the score. The musical output device may be defined in «Program settings».

During playback you can 1) adjust the "Tempo" slider in the instruments menu to change the tempo, 2) fade part or voice playback, 3) control the volume of a single voice/part (through the Project menu) or adjust the volume of the whole composition by moving the "Volume" slider in the Instruments menu.

If you need to play only fragment of a piece you can select needed notes. In this case program will play only selected fragment.

The sound is output on the device what you can set in "Service" | "Settings" | "Devices". It is possible to set options in "Volume control" Windows (you can call it there too).

Also you can switch the metronome on/off ("Playing" panel). It's properties are accessed in "Service" | "Settings" | "Record/Play".

You can mute any part, staff or voice in project window or in properties of correspondent object ("Document" menu). You can also specify the "Solo" for any voice (in context menu of project window), when all other voices will be muted.
The program writes music through MIDI devices. Recording begins from the current position in the score on the current staff according to the tempo defined under settings. The minimum duration of recorded notes is established in «Program settings».

Recording starts when you click the «Record» button and stops when you click the «Stop» button. The current position of the cursor is automatically set in the score according to the given tempo. Musical input devices may be set in «Program settings».

You can set record modes in the record window (which opens after the recording has started).

The «Real time» button sets the score cursor movement mode. When selected, the cursor moves according to the tempo set for the current position, i.e. in real time mode. If not selected, the cursor moves to the next position after the note only if the «Chord» button is not selected. (If the chord button is selected, then the cursor will not move.)

The «Metronome» button sets the metronome properties. If the «Real time» button is not selected, the «Metronome» button determines the duration of the added note. If the «Metronome» button is selected, then the duration of the added note is determined in real time according to the quantizing state; i.e., the minimum duration of a note to be added.

The «Two hands» button sets the mode for a part with 2 staves in which the notes are added to the staves according to their pitch.

Other buttons (semitones, triplets, etc.) are needed to set some extra note or rest properties.

Recording is performed from the device in «Service» | «Settings» | «Devices» | "Input». Also it is possible to tune options in «Volume control» Windows.

Use hot keys to speed up switching modes.

See «Hot keys». 
3.12. Managing tempo

The program allows you to enter "Tempo" symbols into the score by using the «Tempo» button on the panel.

You can change the tempo with symbols such as «Allegro». You can set the properties of the change from the window that can be accessed via the main window «Templates» | «Expressions» | «Tempo».

You can change the list of terms and their presentation via the term editor «Templates» | «Terms» | «List of Terms».

A composition has a default tempo. It is used until new tempo marks are added to the score. This property can be accessed from «Document properties».

You can also set a temporary change in tempo for the whole composition. This tempo change is set in terms of percentages relative to the tempo indicated in the score or relative to the default tempo, which means that all the tempos in the score are changed by the value of the temporary change thus allowing you to play the music a little faster or slower without changing the tempo marks within the score one by one. The property is accessible from Playback window.
3.13. **Working with sound**

You can define volume level for the entire piece and for separate notes. Volume for the entire piece is controlled by the trackbar on the instrument panel.

Each note also contains a velocity in the standard MIDI-defined intervals from 0 to 127. The default value is 64 (half the maximum volume). To change settings, use the panel and select the «Voice note editor» button. First select the notes whose volume requires adjustment, then press the «Voice note editor» button. This opens the volume editor and displays the notes' current velocity in the score near the note. The editor displays the selected notes' velocity as a graph. The «Increment» button increases the volume of the whole selected staff; the «Decrement» button lowers it. The «Alignment» button changes the velocity of the selected notes creating a smooth crescendo (or decrescendo) from the first note to the last. (If the first and last notes are of equal velocity, all notes in between will be set to that same velocity.)

In the program, volume is also adjusted through dynamics symbols placed on the staff.

The program can adjust velocity, which you can alter in the velocity editor, either automatically or manually. To adjust automatically, set «Auto calculate dynamics symbols» in the «Program settings». You can manually adjust the dynamics symbols' properties from the panel through the dropdown box of the «Voice calculate» button.

You can define different effects («Grace notes», «Arpeggio», «Gruppetto», «Trill», etc.) and adjust playback parameters (attack and duration of notes) to values different from those shown in the written score.

The program does calculation of these symbols, which you can alter in the playback editor, either automatically or manually. To calculate automatically, set «Auto calculate effects symbols» in the «Program settings». To adjust manually, select the dropdown arrow of the «Effects calculate» button on the panel.

To adjust playback of individual notes, use the panel's «Playback Editor» button. The editing information displays as bars: the blue bars showing position and duration as set in the written score, and the green bars showing the playback. To change the position or duration of a note in playback, select it and adjust its parameters using the Ctrl+Left, Ctrl+Right or Alt+Left, Alt+Right keys. This does not change display of the notes in the score, only the playback.
3.15. Sound fonts

The program allows adding sound fonts (sf2 files) to playback the music.

Virtual device is created for this purpose «Templates» | «Devices». If the sound font contains all the MIDI standard timbres, it is plugged in with parameters by default (timbre=-1) otherwise you need to specify timbre number for every sound font. This timbre should match the timbre set up in the part or voices of the composition.

Then the device should be selected in «Service» | «Settings» | «Devices» | «Exit».
3.16. Extra MIDI events

You can expand the MIDI stream, generated from the score, with additional MIDI events. During playback or import from a MIDI file, these events are added to the basic MIDI stream.

A special editor was added to control these MIDI events. To open the editor, go to "Windows" | "Editors" | "MIDI Events Editor" in the main menu. The editor looks like a time diagram divided into measures and measure beats. The cursor of the editor is synchronized with the cursor of the score. The events are represented as consecutive bytes in the hexadecimal system of counting. To add a new event, place the cursor of the editor in the desired position and press the «Add event» button. A window will open where you can type in the text of the event in hexadecimal (without spaces) or choose an event from a list and define its settings. To change or delete a MIDI event, select it in the editor and click on the «Change event» or the «Delete event» button respectively.
3.17. Drum notes

To ensure the correct playback of drum notes, the program uses the drum note map, which describes appearance of the note head and the drum note position according to the MIDI specification.

The following two maps are used during the operation.

The first map is common to the system; it operates as a pattern for creating a map for each composition and is available for editing via «Templates» | «Drum Map». This map is not used in the composition directly.

The second map is unique to each composition; it is created from the common map during creation of the composition and is used for playing back the notes. The map is available for editing via «Document» | «Document properties» | «Drum Map».

To playback the notes as drum notes, set the channel number for this part to 9 and set the clef for the staff to drum.

Adding drum notes is similar to adding other notes, except that you also need to press the «Drum note» button (on the «Notes», «Piano» panel) and change the note appearance (the arrow by the «Drum note» button).

See «Drum notes»
3.18. Tablature

You can display musical notation as tablature. First configure the staff in the staff properties menu («Composition» | "Staff" | "Staff Properties»), the «Tablature» property. Set the number of frets and tune the guitar strings manually, or select a guitar from the templates list.

The guitar templates list can be expanded or edited (in the "Maestro" version) in the «Templates» | «Guitars List» window.

To display the notes on two staves (tablature and regular staff) simultaneously, add 2 staves to the part. Configure one of them as tablature and enter notes to it, and then copy the notes to the second staff using the «Paste Special» tool (menu «Edit»).

Adding notes to tablature is similar to adding notes to the regular staff, with these two exceptions.

First, when entering the notes with the mouse, you must change the fret number with the «Ctrl»+«+» or «Ctrl»+«-» keys.

Second, when entering the notes using the virtual guitar, you must set the guitar type to the one set in the composition's staff properties. Use the «Guitar kind» button on the «Guitar» panel.

You can also change the entered note's fret number by selecting it and then pressing the «Ctrl»+«+» or «Ctrl»+«-» keys.

See «Staff properties»
3.19. **Transpose**

MagicScore provides two ways of transposing notes.

- You can specify a Transposition parameter for the part («Document» | «Part» | «Part properties»). Select a value from the drop-down list. In the “Maestro” version you can edit the list («Templates» | «Transposition») by specifying intervals in halftones. The specified transposition is used only during playback and doesn't affect the notation.
- You can also transpose the notes using the «Direct transpose» and «Reverse transpose» down buttons from the panel. You can select the transposition interval from a drop-down list. This method changes both the notation and the actual sound.
- Transpositions in clef changes. You need to specify «Modify notes» property (panel, arrow of button). It makes notes modified according to new clef.

See «Transposition», «Part properties»
3.20. Music record in audio file format

Music record is performed in playback mode. Please open «Record music» window clicking the button in the upper instrument panel or in the menu «Windows» | «Instruments» | «Record music». button should be clicked in this window. Then you can start playback from necessary place in the score (command). You can stop the playback any time using command. The program will record the music of the whole played part of the composition. Then you can save file on the disk clicking button in «Record music» window. In save settings window (opened when saving the music file) you can specify data compression and select codec for compression.

button of «Record music» window allows you to open saved on the disk file.

In «Record music» window you can select record device (if there are more than one), set up the resolution (8-48kHz), number of channels (mono and stereo) and data dimension (8bit/16bit).

For the right music record volume control parameters should be set up, usually only stereo mixer is set up.
3.21. Fonts

Two music fonts (Classic and Jazz) are set in the program. Other non-music fonts are selected from the fonts set up in an operational system. Besides the program allows setting up the fonts of notes and symbols with the aid of additional music fonts' description in «Templates» | «Fonts».

To use music font for music display in the program, every music symbol of the font should match symbols used in a program.

A new line should be added to the list to set up additional music fonts («Add» button) and a font should be selected from the fonts of a system ("Name"). Symbols of the selected font are indicated in the window to the right. Conformity of the program font with the selected font is indicated in the centre. Select a symbol of the program's font then find its image on the list to the right and press the "Set char" button to set conformity of symbols. Press the "Reset char" button to cancel conformity. Vertical removal a change of width can be set for any symbol (as the program needs strict conformity of some symbols' width with their graphical images but sometimes it is not like that). In the same way a scale and edges' interval are set (as notes edges consist of several elements if there is a discrepancy between edges' width of set-in font and additional font a deflection is set.

A change of notes, symbols and any text is made in the upper set of instruments. These symbols should be selected before changing.

Symbols can conclude both music and simple fonts, e.g. «Tempo» (a note - music font, a value - simple font) that's why both music and simple fonts should be changed for it.

See «Font list»
3.22. Metronome

Play back metronome sounds together with score playback or record from external MIDI device, also has separate instrument to imitate metronome sound. Metronome playback and record is set up in «Service» | «Settings» | «Record/Play» or in the windows «Playing», and «Recording». Instrument Metronome is started by clicking the button in the upper program panel.

Tempo is selected from the tempo list or changed manually.

«Time signature» is used to mark the main note.

To change metronome timbre and velocity click "Tuning".

To start playback click «Start» or «Space» key.

To stop playback click «Stop» or «Space» key.
3.23. *The Navigator*

The [image] panel controls movement of the current position through the active score. Positions are given in sections, measures and pages.

The first indicator shows the general size of the active score and what parts of it are filled with data. The second and third indicators show the positions of bars and pages in the relative general size of the score.

If section symbols are entered in the score, these symbols are also reflected in the Navigator.

Carets in the score are synchronized with carets in the Navigator, allowing easy identification of positions and rapid movement to them using the Navigator.
3.24. Hot keys

Switching between files and panels.

- Alt+0, Alt+1... - Activate the first file, second file...
- Alt+N - Activate the panel
- Alt+S - Activate the panel
- Alt+E - Activate the panel
- Alt+T - Activate the panel
- Alt+C - Activate the panel
- Alt+I - Activate the panel
- Alt+K - Activate the panel
- Alt+D - Activate the panel
- Alt+P - Activate the panel
- Alt+G - Activate the panel
- Alt+M - Activate the panel
- Alt+V - Activate the panel

Moving through the staff

- Left - To the previous note
- Right - To the next note
- Up - To the staff above current
- Down - To the staff below current
- Alt+Ctrl+Up - Raise the current entry position 1/2 step
- Alt+Ctrl+Down - Lower the current entry position 1/2 step
- Home - Go to the first note in the current staff
- End - Go to the last note in the current staff
- Ctrl+Home - Go to the first note on the page
- Ctrl+End - Go to the last note on the page
- PgUp - Go to the first measure of the previous page
- PgDn - Go to the first measure of the next page
- Ctrl+PgUp - Go to the first measure of the first page
- Ctrl+PgDn - Go to the first measure of the last page
- Ctrl+Shift+0..9 - Toggle Bookmark
- Ctrl+0..9 - Go to Bookmark

Deleting

- Delete - Delete note(s) in the current position or selected notes and symbols
- BackSpace - Delete note(s) before the current position

Modifying the staff

- Ctrl+Left - Shift selected notes or symbols (or notes in the current position) to the left
- Ctrl+Right - Shift selected notes or symbols (or notes in the current position) to the right
- Ctrl+Up - Raise selected notes or symbols (or notes in the current position) up 1/2 step
• Ctrl+Down - Lower selected notes or symbols (or notes in the current position) down 1/2 step
• Alt+Left - Increase the size of selected notes and symbols (for example "Crescendo")
• Alt+Right - Decrease the size of selected notes and symbols (for example Crescendo")
• Alt+Down - Increase the size of selected symbols (for example "Arpeggio")
• Shift+Up - Raise the stem(s) of selected notes (or notes in the current position) or the orientation of symbols on the staff (for example Fermata)
• Shift+Down - Lower the stem(s) of selected notes (or notes in the current position) or the orientation of symbols on the staff (for example Fermata)
• Ctrl+Shift+Left - Shift left the graphical position of the some symbols (for example "Tempo")
• Ctrl+Shift+Right - Shift right the graphical position of the some symbols (for example "Tempo")
• Alt+Shift+Left - Increase the graphical width of the some symbols (for example "Crescendo")
• Alt+Shift+Right - Decrease the graphical width of the some symbols (for example "Crescendo")

Staff sorting
• Ctrl+Shift+Up - Shift a staff up a staff if more than one exists
• Ctrl+Shift+Down - Shift a staff down a staff if more than one exists

Undo operations
• Ctrl+Z - Undo the last operation
• Shift+Ctrl+Z - Redo the last operation

Copy operations
• Ctrl+X - Copy to clipboard the selected notes and symbols or notes from the current position and delete them from the score
• Ctrl+C - Copy selected notes and symbols or notes from the current position into the clipboard
• Ctrl+P - Insert notes and symbols from the clipboard into the current position

If the "Notes" page is active:

• Q - Press "Pointer" button
• W - Press "Quick input" > "Single input" > "Multiple input" button
• E - Press "Erase" button
• C - Press "Clef" button
• A - Press "Key Signature" ("Tone") button
• Z - Press "Time Signature" button
• I - Press "Tempo" button
• Y - Press "Triplet Feel" button
• V - Press "Grace notes" button
• N - Press "Note" .. "1/64 note" button. Repeated presses cycle through the note values.
• P - Press "Rest" .. "1/64 rest" button
• 1..7 - Press "Note" .. "1/64 note" button
• J - Press "Duplet, Triplet, Quadruplet.." button
• T - Press "Tremolo" button
• U - Press "Dot" > "Double dot" button
• B - Press "Flat"("Bemol") -> "Double-Flat" button
• D - Press "Sharp"("Diesis") -> "Double-Sharp" button
• R - Press "Natural"("Beccare") - > "Natural-Flat"("Beccare-Bemol") - > "Natural-Sharp"("Beccare-Diesis") button
• S - Press "Staccato" button
• O - Press "Portamento" button
• H - Press "Open hat" > "Half open hat" button
• F - Press "Fall Up" > "Fall Down" button
• M - Press "Drum note" button

65
• K - Press "Blank note" button
• L - Press "Slur"("Liga") button

If the "Symbols" page is active:

• Q - Press "Pointer" button
• W - Press "Quick input" > "Single input" > "Multiple input" button
• E - Press "Erase" button
• C - Press "Crescendo" button
• D - Press "Diminuendo" button
• N - Press "End portion" > "End composition" button
• X - Press "Begin repeat" > "End repeat" button
• K - Press "Coda" button
• O - Press "Ottava up"("Ottava alta") -> "Ottava down" ("Ottava bassa") button
• F - Press "Forte" > "Fortissimo" > "Forte-Fortissimo" button
• P - Press "Piano" > "Pianissimo" > "Piano-Pianissimo" button
• Z - Press "FortePiano" > "Mezzopiano" > "Mezzoforte" button
• I - Press "Arpeggio" button
• H - Press "Hand down" > "Hand up" button
• T - Press "Trill" button
• G - Press "Gruppetto" button
• M - Press "Mordent" button
• B - Press "Bracket" button
• A - Press "Accent" ("Acceptus") button
• L - Press "Pedal down" > "Pedal up" button

If the "Chords" page is active:

• R - Switch the input mode "Chords addition"/"Addition of guitar frame"/"Addition of defined chords"
• U - Switch the placing of defined chord or diagrams "Over/under note lines" (Addition of defined chords of diagrams)
• +,- - Change the duration of notes (whole..1/64) (Chords addition)
• N - Change the main note (C..B)
• N - Change the base of notes (5..13)
• B - Press "Flat (Bemol)" button
• D - Press "Sharp (Diesis)" button
• I - Press "Minor (Minore)" button
• J - Press "Major (Maggiore)" button
• S - Press "Sus" button
• O - Press "Omit" button
• A - Press "Add staff" button

If the "Intervals" page is active:

• R - Press "Chord" button
• N - Change direction of interval
• D - Change the duration of note (whole..1/64). Repeated presses cycle through the note values.
• +,- - Change the duration of note (whole..1/64)
• O - Change the number of octaves (0..5)
• U - Press "Dot" > "Double dot" button
• J - Press "Duplet, Triplet, Quadruplet.." button
• T - Press "Tremolo" button

If the "Design" page is active:

• Q - Press "Pointer" button
• W - Press "Quick input" > "Single input" > "Multiple input" button
• E - Press "Erase" button
• T - Press "Text" button
• N - Press "Inscription" button
• K - Press "Lyric" button
• L - Press "Line" > "Arrow" button
• R - Press "Rectangle" > "Fill rectangle" button
• P - Press "Ellipse" > "Fill ellipse" button
• I - Press "Image" button
• A - Press "Arc" button
• P - Press "Pie" > "Fill pie" button
• S - Press "Segment" > "Fill segment" button

If the "Piano" page is active:
• Up, Down - Change the duration of notes added from the keyboard (whole, 1/2, 1/4...)
• Left, Right - Change the current octave of the keyboard (0.. 9)
• Ctrl + Up, Down, Left, Right - Move through the staff
• C, D, E, F, G, A, B - Add the note
• Shift+C, Shift+D.. - Semi-tone of the note, increase
• Space - Add a rest of the current duration
• R - Press "Chord" button
• N - Press "Note" button
• P - Press "Rest" button
• U - Press "Dot" > "Double dot" button
• J - Press "Duplet, Triplet, Quadruplet.." button
• T - Press "Tremolo" button
• M - Press "Drum note" button
• K - Press "Blank note" button

If the "Keyboard" page is active:
• 1..7 - Change the duration of note (whole..1/64)
• Space - Add reast
• I - Press "Duplet, Triplet, Quadruplet.." button
• O - Press "Slur"("Liga") button
• P - Press "Staccato" button
• { - Press "Portamento" button
• } - Press "Tremolo"
• K - Press "Flat"("Bemol") -> "Double-Flat" button
• L - Press "Natural"("Beccare") - > "Natural-Flat"("Beccare-Bemol") - > "Natural-Sharp"("Beccare-Diesis") button
• : - Press "Sharp"("Diesis") -> "Double-Sharp" button
• . - Press "Dot" button
• < - shifting octaves
• > - shifting octaves

When in record mode with the "Recording" window open:
• E - Press "Realtime" button
• O - Press "Metronome" button
• H - Press "Two hands" button
• R - Press "Chord" button
• N - Press "Note" button
• P - Press "Rest (Pausis)" button
• U - Press "Dot" > "Double dot" button
• J - Press "Duplet, Triplet, Quadruplet.." button
• T - Press "Tremolo" button
• M - Press "Drum note" button
• K - Press "Blank note" button
• 1..7 - Press quantize duration "Note" .. "1/64 note" buttons
• +,- - Changing quantize duration of notes (whole..1/64)
4. References

4.1. Document tools

4.1.1. Creating a new document

- Select main menu item «File» | «New».
- Press the «New» button on the toolbar.

Set the main properties of the music composition in the opened dialog (see «Creating a new document»).

4.1.2. Adding a part

- Select main menu item «Document» | «Add part».
- Press the right mouse button in the project window. Select the item «Add part» from the context menu.

4.1.3. Deleting a part

Activate the desired part in the project window.

- Select main menu item «Document» | «Delete part».
- Press the right mouse button in the project window. Select menu item «Delete part» from the context menu.

4.1.4. Changing part properties

Activate the desired part in the project window.

- Select main menu item «Document» | «Part property».
- Press the right mouse button in the project window. Select menu item «Part properties» from the context menu.

Set the properties of the part in the opened dialog.

4.1.5. Adding a staff to a part

- Select main menu item «Document» | «Add staff».
• Press the right mouse button in the project window. Select item «Add staff» from the context menu.

4.1.6. Deleting a staff from a part

Activate the desired staff in the project window or in the staff itself.

• Select main menu item «Document» | «Delete staff».

• Press the right mouse button in the project window. Select menu item «Delete staff» from the context menu.

4.1.7. Changing staff properties

Activate the desired staff in the project window.

• Select main menu item «Document» | «Staff property».

• Press the right mouse button in the project window. Select menu item «Staff properties» from the context menu.

Set the properties of the staff in the opened dialog.

4.1.8. Adding a measure

Set the cursor in the measure at the point where you want to add the new measure(s) using the arrow keys (keys Left, Right, Up, Down) or the mouse. The additional measures will be inserted after the cursor.

• Select from the main menu «Document» | «Measure» | «Add measure».

• Or press the right mouse button in the list of staves and rows. A context menu will appear from which you can choose the «Add measure» item.

A dialog window will appear where you can set the number of measures to add.

4.1.9. Deleting a measure

Set the cursor (keys Left, Right, Up, Down) in the measure you want to delete.

• Select main menu item «Document» | «Measure» | «Delete measure».

• Press the right button of the mouse in project window. Select the menu item «Delete measure» from the context menu.

Set the number of measures to delete in the opened dialog.
4.1.10. Changing the clef on a staff

Activate the tools panel (using the mouse or the Alt+N hotkey).

- Press the button for the desired clef. If it is necessary to set the clef from the expanded list, press the arrow of the clef button, then select from the list.

  Move the mouse cursor over the desired position in the staff and press the left mouse button.

All measures from the current position to the end of the score will be affected by the new clef.

4.1.11. Changing the key signature

Activate the tools panel (using the mouse or the Alt+N hotkey).

Press the arrow on the button and choose a new key signature from the list.

Move the mouse cursor over the desired position in the staff and press the left mouse button.

4.1.12. Changing the time signature

Activate the tools panel (using the mouse or the Alt+N hotkey).

Press the arrow on the select "Time signature" button and set the desired time signature in the opened window. Move the mouse cursor over the desired position in the staff and press the left mouse button.

All measures from the current measure to the end of the staff or to the next time signature will recalculate to the new time signature.

4.2. Marking sheets

4.2.1. Sheet settings

Select main menu item «Document» | «Document properties».

Activate the «Page» panel in the opened dialog. Option you can change are «Metric» (for units of measurement), «Paper size» and «Margin» from the border.
4.2.2. Staff margins

Set the cursor (keys Left, Right, Up, Down) in the desired staff.

- Activate the tools panel (using the mouse or the Alt+M hotkey).
  Change the left or right staff margin using the «Increase left offset stave»  , «Increase right offset stave»  , «Decrease left offset stave»  , «Decrease right offset stave»  buttons.
- Move the staff offset pointer on the top scale of the staff using the mouse.

4.2.3. Intervals between staves

- Select main menu item « Document» | «Properties». Activate the «General» panel in the opened dialog.
  In the «Interval» field, set the minimum interval between staves. If the «Align stave by vertical» check box is marked, the staves will auto-allocate in the sheet and the real interval may be more than the defined minimum.

- Set the cursor (keys Left, Right, Up, Down) in the desired staff.

  - Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey).
    Move the staff up or down using the «Move stave up»  , «Move stave down»  buttons.
  - Using the mouse, move the staff position pointer in the left scale of the staff.

4.2.4. Spaces between measures

Set the cursor (keys Left, Right, Up, Down) in the measure after which the adjustment is desired.

- Activate the tools panel (using the mouse or the Alt+M hotkey).
  Change the space after the current measure using the «Increase space after measure»  , «Decrease space after measure»  buttons.
- Move the offset pointer after the measure in the left scale of the staff using the mouse.

4.2.5. Page breaks

Set the cursor (keys Left, Right, Up, Down) in the measure after the measure where the page addition or page break is desired.

Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey).
Add or delete the current page break after the current measure using the «Add page break»  button.

4.2.6. Setting measure alignment style
Set the cursor (keys Left, Right, Up, Down) in the desired staff or select notes in the desired staves.

Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey).
Press the «Measure align style» button to set the current style.

Press the arrow of the button to set other styles. In the opened window you can set the necessary properties for selected staves.

If you deactivate (uncheck «Active» box) alignment style, settings will come from document properties «Document properties».

4.3. Working with notes

4.3.1. Adding a note

- Activate the tools panel (using the mouse or the Alt+N hotkey).

Press the button of the desired note duration. Move the mouse cursor over the desired position in the staff and press the left mouse button. If the program is in «Multiple input» mode, you can add another note of the same duration. To choose new durations you can press the 1, 2, .. 6 keys, which correspond to the durations 1, 1/2, .. 1/64 or press the right mouse button and select the desired duration from the context menu.

- Set the cursor on the staff (keys Left, Right, Up, Down). Set the current pitch of the note (keys Ctrl+Alt+Up, Ctrl+Alt+Down). Press the Enter key and then press the 0, 1, ..6 key corresponding to the duration 1, 1/2, .. 1/64.

- Activate the tools panel (using the mouse or the Alt+P hotkey). Press the «Note» button if it is not already pressed.

  - Click the mouse on the desired key of the virtual piano. The duration of the additional note is set automatically when you move the mouse vertically over the virtual piano keyboard. Buttons with left or right arrows permit scrolling the available octaves and buttons with Up or Down arrows permit scrolling the available duration settings.
  - Set the duration of additional notes using the Ctrl+Up, Ctrl+Down keys, and the desired octaves using the Ctrl+Left, Ctrl+Right keys. Press the C,D,E,F,G,A,B keys or Alt+C,D,E,F,G,A,B to augment the pitch or Shift+C,D,E,F,G,A,B to lower the pitch.

After adding a note, the measure will automatically be recalculated and the remaining available space in the measure will be filled with rests.

4.3.2. Adding a rest

- Activate the tools panel (using the mouse or the Alt+N hotkey).

Press the «Rest» button for the desired duration in this panel.
Move the mouse cursor over the desired position on the staff and press the left mouse button. If the program is in «Multiple input» mode, you can add more rests immediately. To change the duration press the 1, 2, .. 6 keys, which correspond to the durations 1, 1/2, .. 1/64 or press the right mouse button and select the desired duration from the context menu.

- Set the cursor on the staff (keys Left, Right, Up, Down), press the Space key and then the 0, 1, .. 6 keys, which correspond to the durations 1, 1/2, .. 1/64.

- Activate the tools panel (using the mouse or the Alt+P hotkey). Press the «Rest» button if not already pressed.
  - Click the mouse on the desired key of the virtual piano. The duration of the added rest is set automatically when you move the mouse cursor vertically over the keys of the virtual piano, Buttons with up or down arrows permit scrolling through the available duration settings.
  - Set the duration of additional rests using the Ctrl+Up, Ctrl+Down keys. Press key C,D,E,F,G,A,B.

After adding a rest, the measure will automatically be recalculated and the remaining available space in the measure will be filled with rests.

**4.3.3. Adding a triplet**

Activate the tools panel (using the mouse or the Alt+N hotkey).

If necessary, use the «Triplet» button to select the kind of the added note block (Duplet, Triplet ..). Press the «Triplet» button, and then add notes (see «Adding a note») or rests (see «Adding a rest»).

If the duration of what you want to add is too long to fit in the section of the measure you want to add it to, the addition is ignored.

**4.3.4. Changing pitch**

- Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Change the pitch using Ctrl+Up, Ctrl+Down.
- Press the left mouse button on the note. Holding left mouse button down, move the note to the desired position.
- Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Activate the tools panel (using the mouse or the Alt+M hotkey).
  - Change the pitch of the note using the «Move up» «Move down» «Move up by octave» «Move down by octave» buttons.

**4.3.5. Changing duration**
• Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Change the duration of the note(s) using Alt+Left, Alt+Right.

• Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Activate the tools panel (using the mouse or the Alt+M hotkey).

Change the duration of the note using the «Size increase», «Size decrease» buttons.

### 4.3.6. Changing note position

• Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Change the position of the note(s) using Ctrl+Left, Ctrl+Right.

• Simultaneously pressing and holding down the Ctrl key and the left mouse button on the note, move the note to the desired position.

• Set the cursor (keys Left, Right, Up, Down) on the desired note or select note(s). Activate the tools panel (using the mouse or the Alt+M hotkey).

Change the position of the desired note using the «Move left», «Move right» buttons.

### 4.3.7. Setting the style for beaming notes

• Set the cursor (keys Left, Right, Up, Down) in the desired measure or select notes in some desired measures.

  • Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey). Press the «Beaming note style» button to set the current style. You can select other styles by pressing the arrow on the button. In the opened window you can set needed properties for selected measures.

  • Press right mouse button in the score and select item «Measure properties». In the opened window you can set needed properties for selected measures.

If deactivate (uncheck the «Active» box) for joining notes style, then settings will be come from document properties «Document properties».

### 4.3.8. Joining notes

• Select main menu item «Document» | «Document properties».

Activate the «General» panel in the opened dialog. Set note grouping by default to «Full measure»
• Group isolated notes

  • Set the cursor (keys Left, Right, Up, Down) on the desired note or select desired note(s).
  
  Activate the tools panel (using the mouse or the Alt+M hotkey).

  Group the selected note(s) with the next note, or split the selected note(s) from the next note using the «Join notes», «Unjoin» buttons.

4.3.9. Changing note stem direction

Set the cursor (keys Left, Right, Up, Down) on the desired note or select desired note(s).

  • Change the stem direction using the Shift+Up, Shift+Down keys.
  
  • Activate the tools panel (using the mouse or the Alt+M hotkey).

  Change stem directions using the «Stem up», «Stem down» buttons.

4.3.10. Changing the spacing between notes

• Select main menu item «Document» | «Document properties». Activate the «General» panel in the opened dialog. Set up «Space between notes» property.

• Set the cursor (keys Left, Right, Up, Down) on the desired note or select desired note(s).

Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey).

Change the spaces before or after the selected note(s) using the «Increase space before», «Decrease space before» buttons.

4.3.11. Changing the position and angle of beams

Select a note (if it is a chord, select the whole chord).

Activate the «Modify» tools panel (using the mouse or the Alt+M hotkey).

Change the position and angle of the beams of grouped notes using the «Beam up», «Beam down» buttons.

4.4. Working with symbols

4.4.1. Adding note symbols

Activate the tools panel (using the mouse or the Alt+N hotkey).
Press the desired button «Tremolo» 『』, «Staccato» 『』, «Portamento» 『』, «Flat»(«Bemol») 『』.

- Move the mouse cursor on the staff over the note to which the symbol should be added and press the left mouse button.
- Add notes (see «Adding a note»). In this case the note will be added with the corresponding symbol attached.

### 4.4.2. Adding staff symbols

Activate the tools panel (using the mouse or the Alt+S hotkey).

Press the «Piano» 『』, «Crescendo» 『』, «Trill» 『』.

Move the mouse cursor over the staff position where the symbol should be added and press the left mouse button.

### 4.4.3. Adding expression

(This feature is available only in the «Maestro» version).

Activate the tools panel (using the mouse or the Alt+S hotkey).

To change the expression's display font, press the «Font» button and set the font parameters in the opened dialog.

Press the button of the expression. Move the mouse cursor over the staff position where the expression should be added and press the left mouse button.

### 4.4.4. Adding grace notes

Activate the tools panel (using the mouse or the Alt+N hotkey).

Press the «Grace Notes» 『』 button. (If you need to set grace notes properties, press the arrow on the button.) Move the mouse cursor to the position that needs the grace notes, and press the left mouse button. Use the same method to add more grace notes as needed.

### 4.4.5. Adding ties and slurs (liga)

Activate the tools panel (using the mouse or the Alt+N hot keys).

First select one of the «Slur»(«Liga») 『』, 『』 buttons so that your cursor is ready to tie the notes together.

Move the cursor over the first note to tie and press the left mouse button. Then either
1) release the mouse button and click the second note to tie, or
2) do not release the button, move the cursor to second note to tie, and release it.

4.4.6. Changing symbol positions

Select the symbol(s).

- Change the symbol(s) position using the Ctrl+Left, Ctrl+Right keys.
- Activate the tools panel (using the mouse or the Alt+M hotkey).

Change the symbol(s) position using the «Move right» buttons.

4.4.7. Changing symbol sizes

Select the symbol(s).

- Change the symbol(s) size using the Alt+Left, Alt+Right, Alt+Up, Alt+Down keys.
- Activate the tools panel (using the mouse or the Alt+M hotkey).

Change the symbol(s) size using the «Size increase», «Size decrease» buttons.

4.4.8. Saving symbols

Select a design element in the music staff:

- Select the main menu item «Templates» | «Symbols» | «Save». Set the symbol's properties in the dialog that appears. (The symbol will be added to the program's templates list.)
- Select the main menu item «Templates» | «Symbols» | «Save as». Set the symbol's properties in the dialog that appears. (The symbol will be saved as a file.)
  o Press the right mouse button on the selected design element on the staff and select «Save symbol» from the context menu.
  o Activate the panel by using the mouse or the Alt+S hot key. Press the «Save» button. Set the symbol's properties in the dialog that appears. (The symbol will be added to the program's templates list.)

4.4.9. Adding symbols to the templates list

- Activate the panel by using the mouse or the Alt+S hot key. Press the «All symbols» button. In the dialog that appears press the «Add» button. Select the file of the symbol to be added.
- Select the main menu item «Templates» | «Symbols» | «Add». Select the file of the symbol to be added.
4.4.10. Removing symbols from the templates list

- Activate the panel by using the mouse or the Alt+M hot key. Press the «All symbols» button. In the dialog that appears press the «Remove» button. Remove the symbol from the opened list.
- Select the main menu item «Templates» | «Symbols» | «Symbol list». Remove the symbol from the opened list.

4.5. Working with chords

4.5.1. Adding a chord

(This feature is available only in the «Maestro» version).

- To add chords you must first select the panel using the mouse or the Alt+C hot key. Select the «Chord text addition» button followed by the «Chord addition» button.

  The duration of each chord can be set using the «Duration» button.

  To choose a chord, press the buttons on the main list of chords (A to G).

  The most common chords can be added from the list of chord templates on the right hand side (X, Xm, etc).

- Select the panel using the mouse or the Alt+G hot key.
  Select the type of guitar using the «Guitar kind» option.

  The chord fingering can be transferred to the guitar using the mouse.

4.5.2. Adding a chord definition

(This feature is available only in the «Classic» and «Maestro» version).

Activate the tools panel (using the mouse or the Alt+C hotkey).

Set the chord addition scheme using the «Chord addition» -> «Chord text addition» buttons.

- Press the buttons on the main list of chords.
- Press the button for the expanded list of chords.

4.5.3. Adding a guitar diagram
(This feature is available only in the «Maestro» version).

- To add chords you must first select the panel using the mouse or the Alt+C hotkey. Select the «Chord text addition» -> «Chord addition» -> «Diagram addition». If necessary, select the kind of guitar with the «Guitar kind» button and the place of addition diagram «Over/Under note lines» button. To choose a chord press the buttons on the main list of chords (A to G). Some frames can be added from the list of frame templates on the right hand side or by pressing a button on the panel and setting the diagram manually.

### 4.5.4. Saving chords

Select the entire chord on the staff:

- Select main menu item «Templates» | «Chords» | «Save». Set the chord properties in the opened dialog. The chord will added to the program's templates list.
- Select main menu item «Templates» | «Chords» | «Save as». Set the chord properties in the opened dialog. The chord will be saved as a file.
- Press the right mouse button on the chord on the staff and choose «Save chord» from the context menu.
- Activate the tools panel using the mouse or the Alt+C hotkey.

Press the «Save» button. Set chord properties in the opened dialog. The chord will be added to the program's templates list.

### 4.5.5. Adding a chord to the templates list

- Activate the tools panel using the mouse or the Alt+C hotkey.

Press the «All chords» button. Press the «Add» button in the opened dialog. Select the file containing the chord for addition.

- Select main menu item «Templates» | «Chords» | «Add». Select the file containing the chord for addition.

### 4.5.6. Removing a chord from templates list

- Activate the tools panel using the mouse or the Alt+C hotkey.

Press the «All chords» button. Press the «Remove» button in the opened dialog. Remove the chord from the opened list.

- Select main menu item «Templates» | «Chords» | «Chord list». Remove the chord from the opened list.
4.6. **Working with design elements**

### 4.6.1. Adding a design element

Activate the tools panel (using the mouse or the Alt+D hotkey).


Press the «Text», «Line», «Pointer», «Rectangle», «Ellipse», or «Picture» button, move the mouse cursor over the desired position on the staff and press the left mouse button. Set the properties for «Text» and «Picture» in the opened dialog.

### 4.6.2. Adding lyrics

Activate the tools panel (using the mouse or the Alt+D hotkey).

Press the «Lyrics» button, move the mouse cursor over the desired position on the staff and press the left mouse button. Type the first syllable. To enter the next syllable, press the «Space» key or «-».

### 4.6.3. Changing design elements

- Click the right mouse button on the design element («Text» or «Picture») you wish to change. From the context menu, choose «Edit text» or «Edit picture». Set the new properties in the opened dialog.

- Activate the tools panel using the mouse or the Alt+D hotkey.

Select design element(s) on the staff. Set design element properties for «Text color», «Line color», «Fill color», «Text style», «Line style», «Fill style», «Line width» by pressing the arrow on the corresponding button.

Press the button of the desired property «Text color», «Line color», etc.

- Activate the tools panel using the mouse or the Alt+M hotkey.

Select the design element(s) on the staff. Change the position or size of the design element using the «Move up», «Move down», «Move left», «Move right», «Size increase», «Size decrease» buttons.
The «Horizontal align» , «Vertical align» buttons permit aligning the text on the horizontal or vertical, for example, when writing lyrics.

### 4.6.4. Text alignment

Activate the tools panel using the mouse or the Alt+D hotkey.

Select text on the staff.

Press the button for the desired alignment «Align to left» , «Align to right» or «Align center»

### 4.6.5. Text orientation

(This feature is available only in the «Maestro» version).

Activate the tools panel (using the mouse or the Alt+D hotkey).

Select text on the staff.

To set the orientation, press the arrow on the «Orientation» button.

Press the «Orientation» button.

### 4.7. Changing voices

#### 4.7.1. Adjusting voice dynamics

Select the note(s) needing adjustment.

Activate the tools panel using the mouse or the Alt+M hotkey.

Press the pointer on the «Calculate voice» button and adjust the dynamic properties in the popup dialog.

Press the «Calculate voice» button.

#### 4.7.2. Voice editor

(This feature is available only in the «Maestro» version).
Activate the tools panel using the mouse or the Alt+M hotkey.

Press the «Voice editor» button.

Select the note(s) needing a voice adjustment.

Increase or decrease the voice of the selected notes using the Alt+Up, Alt+Down or Ctrl+Alt+left mouse button keys.

**4.8. Adjusting playback**

**4.8.1. Adjusting playback effects**

Select the note(s) needing adjustment.

Activate the tools panel using the mouse or the Alt+M hotkey.

Press the arrow on the «Effects calculate» button to adjust the playback effects.

Press the «Effects calculate» button.

**4.8.2. Playback editor**

(This feature is available only in the «Maestro» version).

Activate the tools panel using the mouse or the Alt+M hotkey.

Press the «Playback Editor» button.

Select the note(s) needing adjustment. Change the duration or start position of the note(s) using the Alt+Left, Alt+Right, Ctrl+Left, Ctrl+Right keys.