DRUMGEN - THE ULTIMATE DRUM EXERCISE GENERATOR

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INTRODUCTION

Thank you for using DrumGen. This program has been designed and developed by me, Stephan Pieterse. I have worked extremely hard in trying to create a program that will, hopefully, be useful to drummers everywhere to develop their skills.
NOTE: This program is NOT intended to be used to create drum-loops or other similar outputs.

SYSTEM REQUIREMENTS

MINIMUM:
Windows 98 SE or higher. (Linux and Macintosh systems are not supported)
266 MHz Processor or better.
64 MB RAM or more.
10 MB free hard-drive space.
A display card running at 1024x768, in at least 256 colour mode recommended. (See "KNOWN PROBLEMS" section)
A sound card with MIDI output capabilities.
Speakers or Headphones.
A keyboard and a mouse are required in order to fully use the program.

For MIDI input, you will need a device capable of MIDI-output, and a component in your computer capable of MIDI-input.

NOTE: This program has been tested on various specifications to ensure compatibility. The above specifications are only an indication of what is required to run the program. Features such as the Play Along Kit, and the Rhythm Trainer will function considerably better on higher-end machines.

GETTING STARTED

INSTALLATION:

The program does not have an installation program! Simply copy the main executable (GenP.exe) into the directory of your choice, and start using it!

USING THE PROGRAM:

The main screen consists of The Rhythm Chart. There are four lines in the Rhythm Chart, labelled Right Hand, Left Hand, Right Foot and Left Foot respectively. For each of these, you can create a unique pattern. The pattern creation is split into various sections. Firstly, the rhythm pattern, then the accent pattern, then the note values, then the subdivisions. You can choose each of these yourself, or let the program generate random ones for you. You can also select the amount of bars the exercise should be generated for, and the count to be used. These settings can be changed in the small panel above the Rhythm Chart. To access the pattern options, middle click on the lane you wish to change. You can enter a rhythm or accent pattern in the specified boxes, or let the program generate random ones for you. A pattern consists of 2 characters: 'x' indicating a note, '-' indicating a rest. All rhythm patterns are constructed using these characters. Accent patterns are constructed using 'X' to indicate an accent, and 'x' or '-' to indicate normal note volume. A row of buttons presents the different note values that can be used for the specific limb (Whole, Half, Quarter, Eighth, Sixteenth and Thirty-Second Notes). Selecting the "Mute" button will disable the sound of that specific limb. When the button is depressed and grey, it is considered not muted. When the button is pressed and coloured yellow, it is considered to be muted. The program works with subdivisions in a unique manner. Please see the "Complex and Inverse Subdivisions Section. If you want to quickly edit a pattern, move the mouse over the Rhythm Chart, and a grid will be displayed. Right click for options, and left click on a cell to perform the selected action.

NOTE: The notation used for this program is NOT standard drum notation. Instead, the program uses 4 percussion lines, with non-standard note heads. I am certainly sorry for any inconvenience, but I believe this system is better, as individual limb patterns can be created without necessarily being restricted to a certain voicing. Also, various subdivisions can be used, creating the ultimate independence exercise!

COMPLEX AND INVERSE SUBDIVISIONS

The idea of complex or inverse subdivisions is from a small mathematical arrangement of standard subdivisions which I simply applied in another context. Instead of playing a subdivision only between 2 notes, why don't we generalise it a bit? Why not have 4 notes in the space of 3? This is now possible to display as well as hear how it fits in with the normal pulse. The "Subdivisions" box lets you specify the amount of notes you want (up to 9) and the amount of notes you want them to be spaced in, which can be specified in the "Subdivision Note Spacing" box. To turn off complex and inverse subdivisions, deselect the "Enable Complex Subdivisions" check box in the "General Options" window. If you just want to use basic subdivisions, remember to set the "Subdivision Note Spacing" to 2.

Quick Definition:

Inverse Subdivisions: An inverse subdivision is a reversal of a normal subdivision. For instance, a triplet now becomes 2 notes in the space of 3. Playing this will generate a feel exactly like that of the triplet, but putting it in the correct context with music and / or a steady pulse will make the inverse feel apparent, as both your mind and your body may recognize it, but because you are thinking of it differently, you may be inclined to feel you are playing it incorrectly (even when you may be playing it perfectly.)

Complex Subdivisions: A complex subdivision is a non-standard, non-inverted subdivision. 5 notes per 7, or 3 per 5, are both complex subdivisions. There is no standard form of these subdivisions. Being able to play these perfectly along with all their pattern permutations should take a long time, so do not be discouraged. The best way I can recommend learning these is to take a steady pulse. Play either the subdivision or the spread (the number of notes the subdivision spans) and play a "normal" subdivion of that over the pulse. Then, practice doing that WITHOUT thinking of it, but make sure you do it correctly. When your first limb is on "Auto-Pilot", so to speak, the second limb should start doing the second subdivion. Note that this will be a subdivion over the standard pulse, which will generate the correct feel of the complex subdivion. Now, the really hard part, is taking the spread and regarding that as the pulse. Remember, a complex subdivion is NOT 2 different standard subdivions at the same time. One of the subdivions IS the pulse, and when playing with music, this will usually create an incredibly odd feel.

Note: Although neither of these advanced subdivion forms can always be of great use in a musical context, your understanding of rhythms and your independence will greatly increase, and if used correctly, will create a killer, unmatched solo!

DEVICE CONTROLS

The device controls can be viewed/hidden by selecting the "Device Controls" option in the "Windows" menu. This form contains the MIDI controls. From here you can play, stop or pause the MIDI playback. When these buttons are inaccessible they appear flat and greyed out. Next to these buttons is a box containing an up and a down arrow, and a number. This is the tempo to play the exercise at, and can be used to quickly change the tempo. Next to this is a button with a small metronome image. In the top right corner will appear either a red circle or a green check mark. This is to indicate whether or not the metronome sound is on or off.

THE KIT VOICING FORM
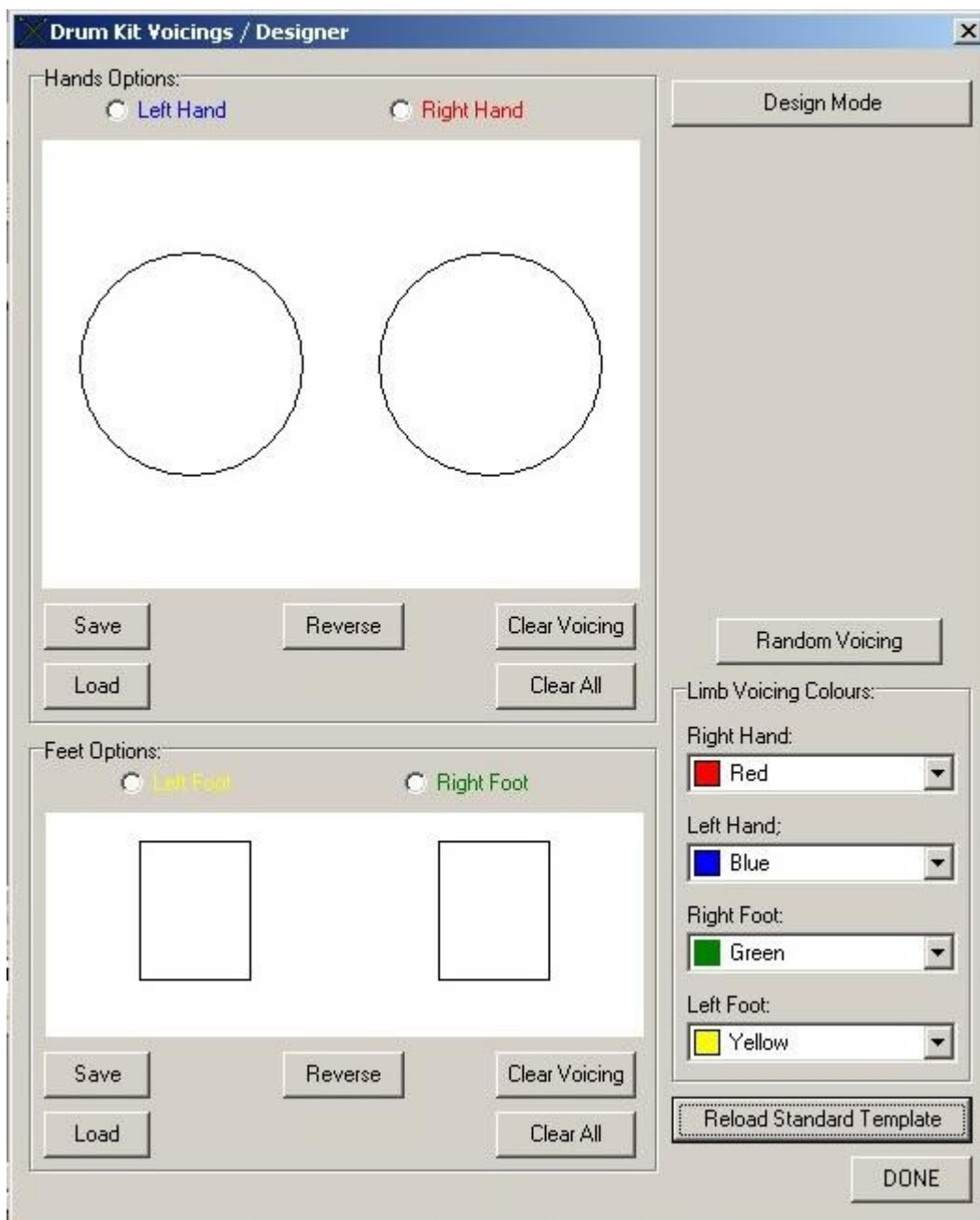
To access the kit voicing options, select "Tools" and then "Voicing / kit Designer" from the main menu. Alternatively, you can click on the crossed drumsticks icon on the toolbar. On the voicing form, there are two images. At the top, the larger rectangle, is used to hold voicing data for the hand patterns. At the bottom, the smaller rectangle is used to hold voicing data for the feet patterns. Click on one of the radio-buttons representing the limbs in order to start drawing a voicing pattern. To get a visual representation of what you are playing, you might want to draw a version of your own drum kit on the canvases. Click on the "Design Mode" button to activate design mode. The Design Options will now become available to you. You can select which shape to draw, how thick its lines are, and what colour the lines should be. You can also assign certain areas to a specific sound (Multiple Voicings per limb need to active to do this. If this is not activated, a standard template will be used which cannot be edited). If you want to save a voicing pattern, select "Save" for either the hands or the feet. Go to the directory in which you wish to save the files, type in the desired name, and then press save. If you want to load a voicing pattern, select the "Load" option for either hands or feet, locate the Voicing data file and click load.

THE PLAY ALONG FORM
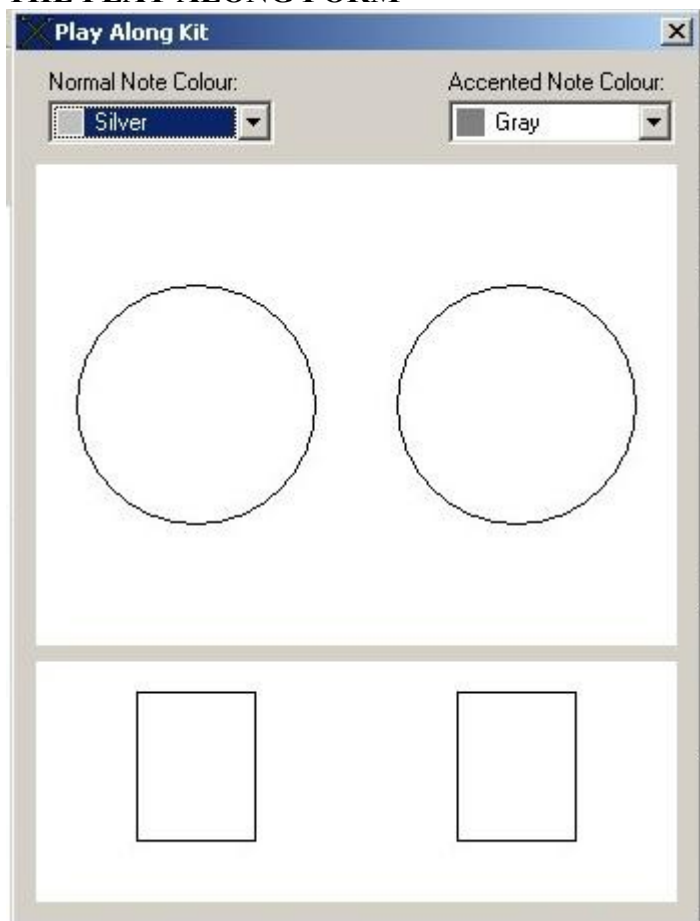
This form displays the kit with the voicings created in the Kit Designer. To access it, select "Play Along Kit" from the "Tools" menu. The colour for normal and accented notes can be chosen from the colour boxes at the top of the form. When the exercise is played while this form is open, the appropriate parts of the kit will light up to indicate that the current note is being played there.

STICKING PATTERNS
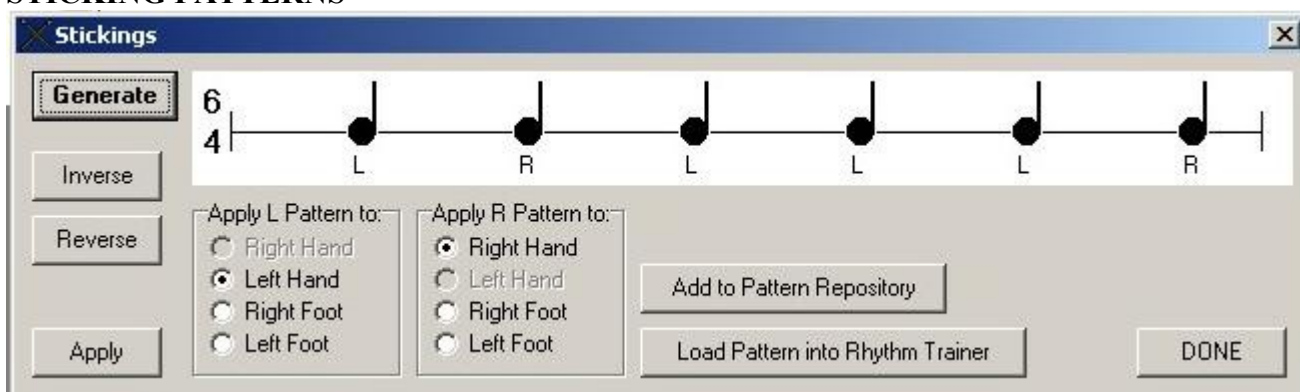
To access this feature, select "Sticking Patterns" from the "Tools" menu. Press the "Generate" button to generate a random sticking pattern. This pattern can be inverted (Right changed to left and

vice versa) or reversed (First note last, etc.) by pressing the appropriate button. The resultant pattern can be used as a standalone exercise, or it can be applied to any two of the four limbs by simply selecting which limbs you want to apply the pattern to from the appropriate groups of options, and the pressing the "Apply" button. The pattern can also be saved to the Pattern Repository by clicking the "Add to Pattern Repository button.

RHYTHM TRAINER

To access this feature, select "Rhythm Trainer" from the "Tools" menu. This feature allows you to make your own speed and time exercises. Select, in the "New Item" group, the settings for which you would like the metronome to pulse. Then press the "Add Item" button. Up to 255 different settings can be entered. All the items will be displayed in the grid on the left-hand side of the screen. The Custom Pulse feature uses the same characters as the Metronome's. 'X' for an accented note, 'x' for an unaccented note, and '-' for no note. Options regarding the exercise include: Repeat. Once the exercise has been played through, the timer will start at the beginning again if this box is checked. Loop Front to Back. If this box is checked, the exercise will be played through, and then played backwards.

If you have a device capable of MIDI Input, you can also play along to the exercise to check your progress. Check the "Pad Active" Box. A small text pop-up will display how accurately you are playing to the click.

If you want to use the pad to play an exercise, check the "Check Voicing" box. Load a pattern from the sticking patterns form or from the pattern repository. You can select the voicings to be regarded as "correct" for the 2 limbs. When the exercise is playing, a small text pop-up will inform you if the voicing you are playing is right or wrong.

PATTERN REPOSITORY
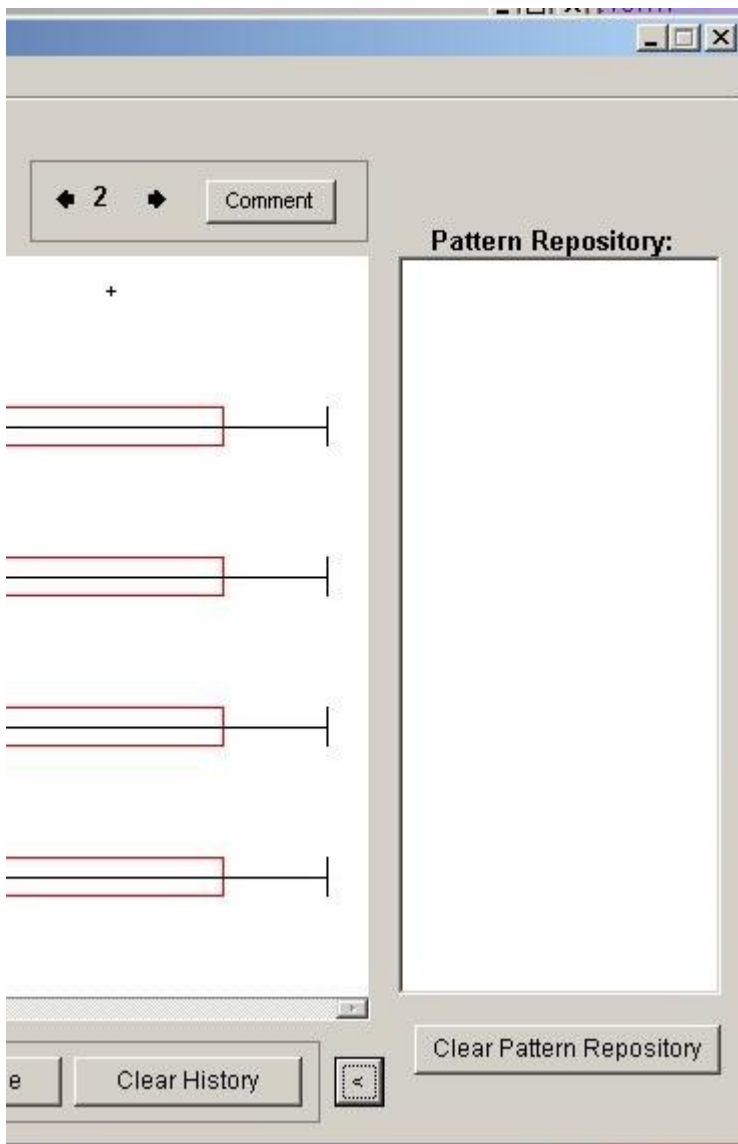
The Pattern Repository appears on the right hand side of the screen. Here, patterns that have been generated can be stored. This is useful for generating random exercises, and then replacing single patterns with those stored in the repository. Patterns are automatically added to the repository if randomly generated (to turn off this feature, un-check "Automatically Add Patterns to the Pattern Repository" in the General Options window). Patterns can be deleted or applied by right-clicking the appropriate pattern in the repository. To save or open a set of Pattern Repository patterns, select the appropriate option from the "File" Menu.

SAVING AND LOADING PATTERNS
To save or load patterns, select "File" from the main menu and select the appropriate option. Files can either be saved in the standard DrumGen format (.gdv) or as a Bitmap file (.bmp) which can easily be read without re-opening the program. The Pattern Repository can also be saved as a separate file. To do this, simply select the appropriate option from the 'Save' sub-menu.
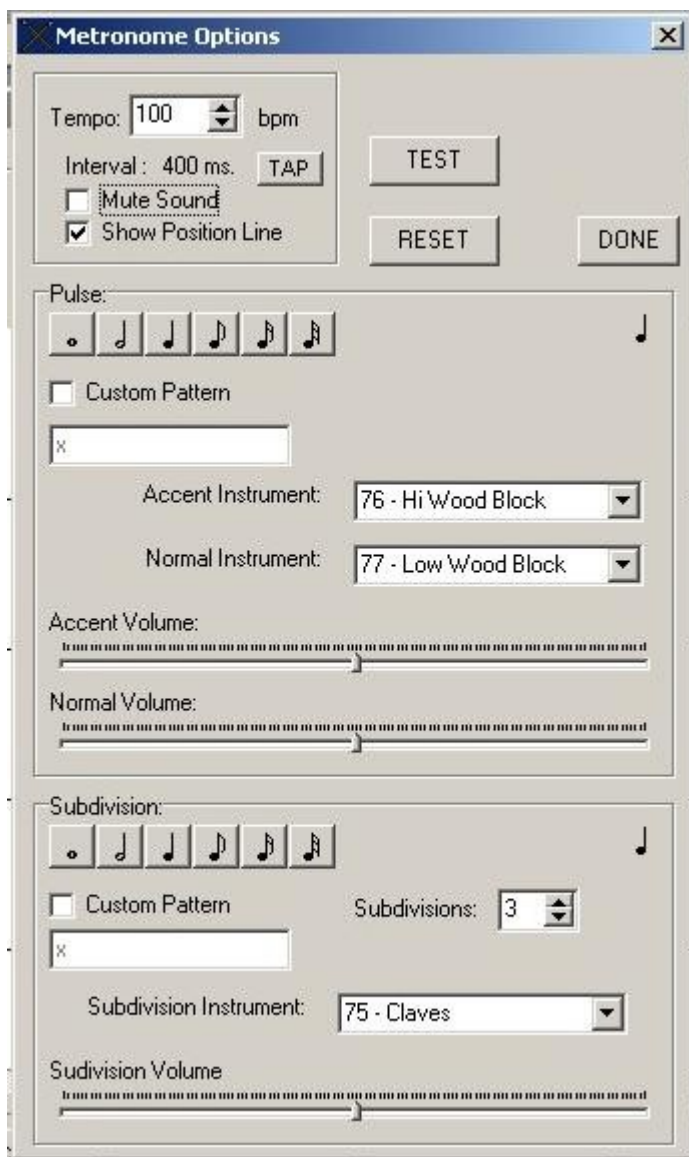
MIDI DRUMS
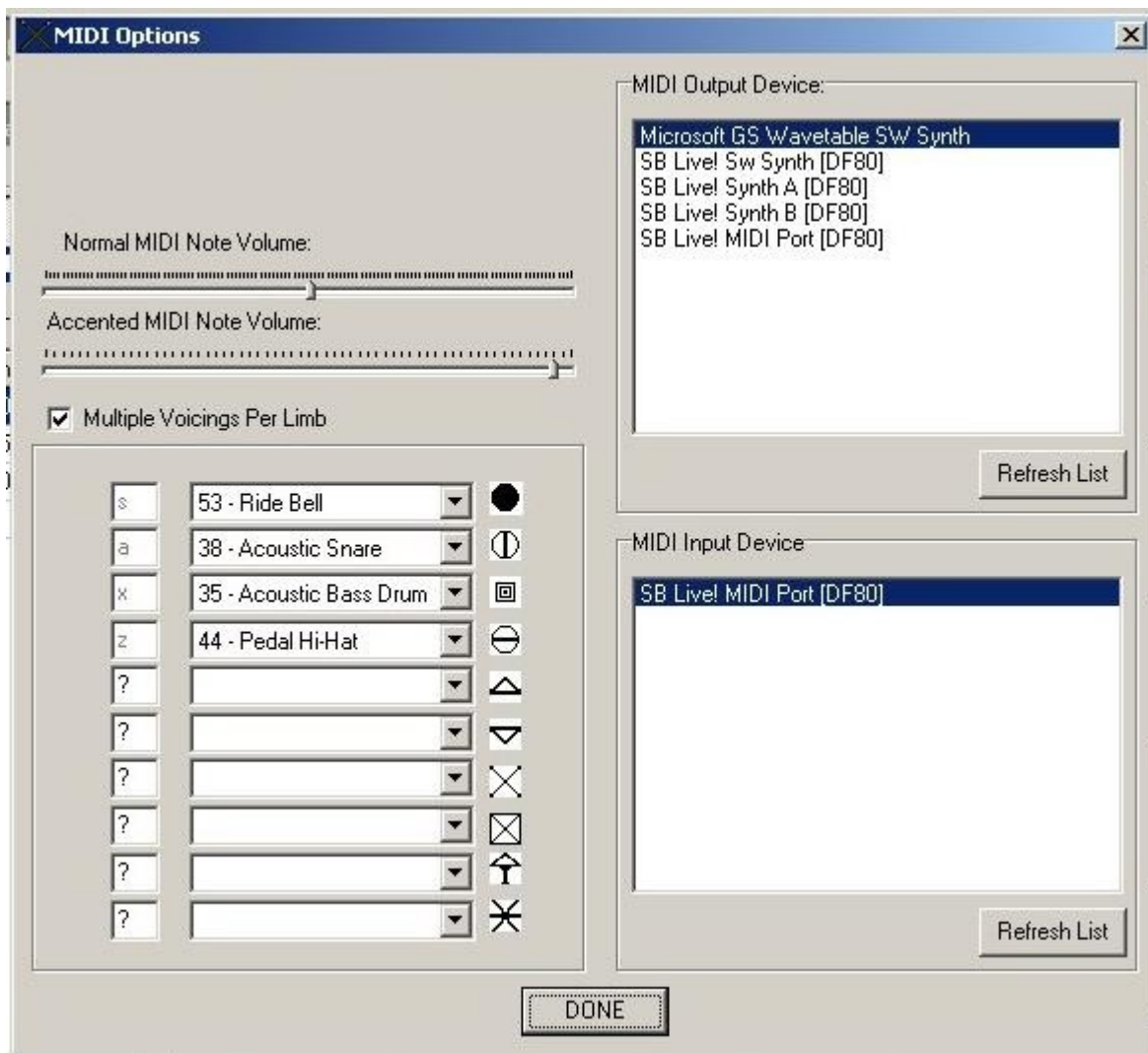
To access the MIDI options, select "Options" and then "MIDI Options" from the main menu. Here, you can select normal and accented note volumes and select the sounds that should be played. There are two modes in which the drums can function, Single Voicing and Multi Voicing Mode. In Single Voicing Mode, each limb plays only one sound. The notes for all the limbs are represented using the same standard symbol. In Multi Voicing Mode, each limb can play a variety of sounds (up to 10 different sounds) and each sound is represented by a different symbol. Each sound also has a unique letter (Standard letter is x). A '?' means that that specific symbol will not be used. When in Multi Voicing Mode, you can use the characters specified to create patterns on the Rhythm Chart. These characters should be entered into the appropriate boxes (excluding accent patterns) or via the right click menu of the Rhythm Chart. You can also select the device that should be used for MIDI output and/or input. A message will be displayed upon start-up and on refreshing the device lists if MIDI input and/or output devices have not been found.

NOTE: If at least one device has not been found for either MIDI input or output, features using them will be deactivated.

THE METRONOME

To access the metronome form, select "Options" and then "Metronome Options" from the main menu. Here, you can set the tempo for the metronome (which is also the tempo for the MIDI drums), the note values, and the subdivision value for the metronome pulse. Whether or not the metronome should play and/or show the current position on the grid can be changed using the appropriate check boxes.

The volume for the metronome can be changed at the bottom of the form.

You can also enter your own pulse pattern, by checking the "Custom Pulse Pattern:" box, and then entering your own pattern. Pulse patterns should be entered as follows : 'X' indicates an accented note. 'x' indicates a normal note. '-' indicates a rest, or no note. Pulse patterns can be of any length up to 255 characters.

The sliding bar that keeps track of where you are on the rhythm chart pulses along with the metronome, and also shows subdivisions the metronome might be playing. Note that the slider can only be set to start on a pulse of the metronome e.g. if the metronome is set to quarter note triplets, you cannot start the exercise on an eighth note.

HISTORY

This gives the user the ability to save various patterns temporarily within the program. Patterns are automatically saved and loaded as the user uses the program. The stored patterns (Maximum of 10) can be accessed by using the arrows above the Rhythm Chart. To clear the history, click on the "Clear History" button which appears on the bottom of the window alongside all the other clear functions. To add a comment to a pattern, click the "Comment" button next to the current pattern number. This will display a form with the current comments, if any. Comments may be up to 255 characters long. When a pattern is loaded and a comment is present, by default, the window will be displayed with the comment. To turn of this feature, deselect "Display Pattern Comments" from the General Options menu.

PATTERN FEATURES

To invert or reverse patterns, click on the "Functions" menu option and select the option of your choice. Alternatively, you can right click on the appropriate pattern in the Pattern Options section, and a pop-up menu will display the available options.
Patterns can also be shifted, one note at a time, either left or right. When the Pattern Editor is opened, you will see a pair of arrows next to the edit box containg the pattern. Simply click these to the left or right to shift the pattern in the appropriate direction.

ACCENT OPTIONS

These options are available from the General Options Menu. When 'Shift' is selected, the Accent pattern is applied over a new Rhythm pattern as usual. When 'Adapt" is selected, and notes are deleted / added, the Accent pattern is adapted so that the all the notes that previously had accents still do, and new notes do not.

STUDY TIPS

Although this program can be used for independence, accuracy and time training, the help of a good teacher is still invaluable. This program does not teach techniques, and to a great extent does not teach proper sight-reading. It is also essential to play with and learn from other musicians, not just drummers. You may have all the drum playing speed and skill in the world, but if you cannot work and play with other musicians, your chances of being in a gigging (and hopefully paying) band decrease exponentially. When practising sticking patterns, remember, your feet are just as important as your hands! Try doing the sticking pattern with your feet. Once you have accomplished that, try the sticking pattern between, say, your left foot and your left hand. Always try new things, rudiments can be a great tool, they don't have to become boring! Invest in some material to help you learn sight-reading. This may not seem as valuable to you if your not in a situation where reading and learning material quickly is essential, but learning to sight-read will greatly increase the amount of resources available to you to learn from, and understanding at least a small part of theory will make you a better musician as well. Remember to try your own ideas as well, or develop some of the patterns form the program in your own ways. This program provides many features that can be of great use, but it's still your creativity at the end of the day that will make these exercises your own.

KNOWN PROBLEMS

The following is a list of minor bugs or errors which may occur, and these will be fixed (if possible) as soon as possible.
Video Related:
This program has been designed to work best at a resolution of 1024x768. Although the application will change according to your resolution, I cannot guarantee a proportional, detailed interface at other resolutions.
Some screens may flicker at times.

General:

The Play Along Form images tend to destroy themselves at unpredictable times. To resolve this problem for the time being, simply reload the play-along form. In some cases you may have to restart the program though.

IF YOU FIND A BUG

If you happen to stumble across any part of the program that's not working correctly, (or at least you think it isn't) please notify me and I will try to rectify the problem as soon as possible. When notifying me, please be sure to include the entire error message (if not applicable, a description of what the program was doing wrong), and what you were doing or attempting to do at the time the error occurred, including any data that you may have entered or modified before the error occurred (even if it's not related to the same window that crashed).

HOW TO REGISTER

Open up the "Register" window from the "Help" menu. Fill in the appropriate details, and click the "Register" button. A file will be generated in the directory in which the program is located. You can send this file to me via any electronic means. Once I have received your registration, a code will be generated and be sent to you. Enter this in the appropriate box, and click the "Activate" button. You are now registered!

REDISTRIBUTION

This program may be redistributed freely, but registration codes (Licences) may not. The licence grants a user permission to use the program on one (1) computer at a time.

CONTACT ME

If you have any further questions, or suggestions or comments, please don't hesitate to e-mail me and tell me about it!
E-Mail : slayercmys@mymail.ro or slayercmys@gmail.com
MySpace : www.myspace.com\dromslet
FaceBook : www.facebook.com/profile.php?id=657101924

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DISCLAIMER

I, Stephan Pieterse, hereby declare myself exempt from any damages that may arise from using this product (GenP.exe) whether directly or indirectly caused, of any nature whatsoever. I have taken every precaution possible to ensure that this program is virus free, as well as error free. In the event of any damages to data or other property of the user that may arise while using this program, whether directly or indirectly, I cannot be held responsible.

THANKS TO

God, for some talent with programming and understanding and patience, and lets not forget giving me a drum kit and the opportunities to play and learn! For everyone who is a friend who put up with my rantings about the program (Michael en Wilmie) My dad, for supplying me with a computer and some basic programming knowledge a long time ago, and still supports and aids my endeavours no

matter what. About.com, whose articles and components have been invaluable in my attempts to a better program. Michael Bester again for doing most of the testing. And you, for using my program! I hope this program inspires you to be a better technical drummer!