SoRGoN WB Takke 1.0

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About WB Takke What is WB Takke **Introduction** Using the Utilities Using WB Takke File Menu Select CBK File Load Patch Save Patch <u>Exit</u> **Parameters Menu** Name Links and Ranges Sampled Sources **Modulation Sources Primary Modulations** Secondary Modulations Effect Types General Settings Test Menu **Keyboard** Velocity and Aftertouch **Joystick** <u>Staff</u> Sampled Sources Graph Auxiliary Envelope Graph Select MIDI File Play MIDI File **Options Menu** Test Gadgets Moveable Patch Changed Warning **MIDI** Configuration Save Settings on Exit Tools Menu List Selected CBK Run CBK Lister Post Selected CBK Run Mixer Help Menu **Contents** <u>About</u>

Keyboard Shortcuts

Sample Files Uninstalling WB Takke

This program **requires** a **mouse** and Microsoft® Windows[™]/Windows for Workgroups 3.1x. It is not guaranteed to work under another version of Windows or another operating system that claims to run Windows applications.

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About this documentation

GoRGoN ltd. is a Turkish firm and is specialized in special software development projects most of which do not even require any documentation at all. As far as WB Takke project is concerned, original Turkish documentation (help file) has been translated by the programmers themselves who claim no proficiency in English. We hope that final documentation is at least understandable...

WB Takke is Shareware...

WBTakke software package, which includes all files distributed (not only executables), is shareware. That means you have an initial right to use the package for 30 days. After evaluating the package in this period you may decide to purchase the package or you should delete all files distributed and abandon using the software. You may distribute the package as a whole provided that you do not charge any money for doing this. Make sure you read the Shareware License terms at the end of this page.

This shareware, or you may call demo, version of the software differs from the registered version in only one way. You will not be able to save a patch with the shareware version. Registered users (those of you who purchase the package) will receive fully working version.

Some may call this kind of distribution not as shareware but as crippleware, because a feature has been cut. But,

- Package includes two fully working utility programs,
- Sample files which may have an immediate use,

- And although WB Takke is not able to save, it is otherwise fully functional and may be used to view any patch parameters, experiment with them and hear the results.

Pricing

1. If you would like to purchase the rights to use sample files, WB List and WB Post utilities and WB Takke Demo version (that means we will not send you any additional software but a license statement only), price is 5 U.S. dollars. This price includes a snail mail of the license.

2. If you would like to purchase the rights to use all the software package including WB Takke registered version (that means you will receive the latest version of the fully functional WB Takke and other files), price is 30 U.S. dollars. This price includes a 3.5 inch diskette and surface mail costs. In case you would like to receive your diskette quicker, please add 10 U.S. dollars for express delivery.

(Turkish residents please call for pricing information!)

When we receive your payment you will be a registered user of the software. That means you will be informed of new versions and bug work arounds. You will have discount prices for new versions of this and other GoRGoN software. In case a major bug is spotted, all registered users will receive a bug free latest version free of any charge other than package and posting costs.

How to reach us

Our address and telephone/fax number is listed below:

Address GoRGoN ltd. Rihtim C. Izzettin S. No: 3/1 81320 Kadikoy ISTANBUL TURKEY Tel and Fax ++ 90 (216) 347 8705

Just leave us a note with your name and telephone number, if you want us to call you back, in case and which is most likely, an answering machine answers your call. You need a fax machine that can initialize the communication else your fax call will not be recognized. (Some fax/modem cards need the answering fax machine initialize the conversation)

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Easiest way to send us money is, of course, sending cash in an envelope, which looks like it does not contain any cash, preferably by registered mail.

You can check with your local PTT that if you can send money to Turkey by money order. In that case make the order payable to **BURAK KALAYCI**. This will make things faster...

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Swift Code for the Bank is **ISBKTRIS** Account number of **GoRGoN Itd.** is **1025 (Rihtim - Kadikoy / ISTANBUL) 30421 2770066**

We can accept American Express Travelers Cheques if we have to. In that case please add 6 U.S. dollars to the price for additional costs.

Please do not forget to include your name and address, otherwise we will not be able to even return your money back.

About a new version

Well, this is version 1.0 of the software and it lacks a toolbar, a status line, context sensitive help and many advanced features we already have in our minds. There will never be a version 2, unless you support us by purchasing the software initially if you intend to use it (i.e. by not pirating our software), then by sending your comments and reporting bugs.

About Mouse Button Terminology

Generally, for right-handed users Primary mouse button is the left button, for left-handed users it is the right mouse button. Excluding the middle mouse button if it exists, remaining button is the Secondary mouse button. If things do not seem to work, try reversing their meanings...

Important Notice

GoRGoN is not related to Creative Labs, inc. and has not received any information from Creative Labs, inc. when preparing this software for release. WaveBlaster documentation has been the major source of information. All other information contained here and used when programming the package, including parameter names and their functions, has been found empirically by GoRGoN. We would be happy to receive any comments and bugs, misnamings, etc.

Some parameters will have values like **[16]** which means they are not known to us at the time of this release. Any contribution will be appreciated.

Sample names list has been re-ordered by GoRGoN, for the list included with our WaveBlaster documentation did not seem correct. Both WB List and WB Takke uses this re-ordered list. Please connect us if you have any reason to think this list is not correct.

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What is WB Takke

WB Takke is a utility program for changing patch parameters of Creative Wave Blaster. It will have no use if you don't have Wave Blaster hardware handy.

WB Takke is a CBK files editor. CBK files contain MIDI exclusive messages that can change parameters of patches active on Wave Blaster. By editing CBK files and sending new patch parameters to Wave Blaster you can effectively change many of the characteristics of sounds produced.

Wave Blaster is an add-on MIDI synthesizer for Sound Blaster 16 using Wave-Table technology capable of producing semi-professional/professional quality sounds. While it is as programmable as many other synths around, Wave Blaster package does not include any software for doing this.

WB Takke enables you to create your own combinations, change patch parameters any way you like. Ever found the attack of violin too slow? Would you like to control volume with your external keyboards joystick? Here comes in WB Takke for rescue.

Of course, except for trivial changes you make to genmidi patch settings, new patches created by WB Takke will not be general MIDI compatible just like the patches in effect.cbk provided with Wave Blaster.

If it is a little confusing, just think it this way: You could have created the sounds provided in effect.cbk using WB Takke, if you haven't had the file.

There comes also two little utility programs with WB Takke, WB Post and WB List, which also operate on CBK files. WB Post sends messages stored in CBK files to Wave Blaster and WB List lists patches present in a CBK file.

Introduction

Wave Blaster uses Wave Table technology which means it has some sampled sounds (a wave table) stored somewhere and it uses these samples as a base to produce more realistic sounds than, say, the FM synth on your Sound Blaster.

These samples (wave images) are not really special. For now, you may think about them as WAV files you may easily create yourself. Of course, they are quality recordings of various instruments and sounds.

Wave Blaster modifies these samples basically in two ways. First of all, it has the ability to change the pitch of the sample to produce the desired note. Then, Wave Blaster is capable of modifying the sample according to some parameters. While this seems rather limited, some very powerful modifications to the base sample or samples are available.

A CBK file contains these parameters for 1 to 192 patches. What it actually contains is appended MIDI messages that change parameters for a given patch. If you have ever loaded effect.cbk using WB Panel, you already know that some very different sounds can be produced. Since the samples Wave Blaster contains are fixed, all the different sounds are produced by varying the patch parameters.

When Wave Blaster is initialized, same parameters contained in the genmidi.cbk file becomes active. If you ever change the patch settings by sending messages contained in another CBK file, you may restore to the default setting by sending genmidi.cbk to Wave Blaster. Genmidi.cbk contains 192 patches. 128 of these are general MIDI compatible patches and the rest are special percussion patches for Wave Blaster, which can be reached by using MIDI channel 10.

What does general MIDI compatibility mean? Patch numbers for the same instrument may not be the same on different synths. So if you record a MIDI file using patch 1 on your synth which corresponds to, say, Grand Piano, when you distribute the file, patch number 1 may be some other instrument, perhaps Violin, on some other synth so your file does not play correctly on all platforms. But if you use general MIDI compatible patch numbers, it is assumed that the file will be played using the same general MIDI defined patch numbers.

By using general MIDI patch numbers you may assume that correct instruments will be used for your distributed MIDI file, but you may never be sure of the type of the synth that will play the file, which may have inferior sounds or a very odd Grand Piano patch. So it does not matter much if you make little enhancements to general MIDI patch parameters even if you are creating a file for distribution. If you make some big changes to some patches and use them, then the disadvantage will be that anyone who has not loaded the same patch parameters will not be able to listen instrument-correct music from the file.

If you do not intend to distribute MIDI files you have created, there is no reason for you to limit your music by using only general MIDI defined patches. If you like you may distribute the CBK file which contains patches used in the MIDI file, that should be sent to Wave Blaster before playing the file. (You may even include the messages in CBK file in the MIDI file itself!) Of course this is only meaningful if you are distributing the file for use with Wave Blaster only.

Mt32.cbk is provided with the Wave Blaster package because there are lots of pre-general MIDI MIDI files that use the patch numbers and corresponding instruments as defined by the MT-32 synth. Using WB Takke you may also create a CBK file for your synth if it does not have general MIDI compatible patches and instruments. For example, If you own a Korg M1 and many MIDI files that use its patches, instead of changing every file and be content with substitutes for some none existing sounds, you may create an M1.CBK file which you will have to send to Wave Blaster before you play any of these MIDI

files.

If you are seriously into music, you should not be content with the sounds and effects provided. Details are important for the caring musician. Every song requires its own patches, may be its own piano patch. Well, this may sound too much for most of us but did you know that some samples stored is not even used in any of the patches provided by genmidi.cbk? Nevertheless, we all need our favorite patches.

Using the Utilities

We tried not to duplicate any of the functionality of WB Panel, so you will still need it to create a new CBK file and to move patches within the file. The worst thing about WB Panel is that it sends the active CBK file to Wave Blaster every time it is started. It also fills the gaps with parameters contained in the active CBK file, if the CBK you wish to send Wave Blaster contains less than maximum number of patches. And it takes time... It may take up to 20 seconds to send 192 patches to Wave Blaster.

WB Post may be used to send any valid CBK file to Wave Blaster. It may take the file name from command line and it will only send the patches included in the file. So it will take much less time if all you want to send is a few new patches. You may also add WB Post with your favorite CBK on its command line to your startup group so that CBK is sent to Wave Blaster every time Windows starts. You may return to default genmidi setting anytime by sending genmidi.cbk to Wave Blaster using either WB Panel or WB Post.

This **only send what is present** behavior used by WB Post may seem to create some problems. Wave Blaster is capable of linking patches, which is used by percussion patches exclusively. When you link a patch with another and play the patch, actually both patches play. For example, If you link patch 20 with 21 and play patch 20, patch 21 will also play. But if patch 21 was not updated correctly, that is if it was not included in the CBK file, whatever patch 21 active on Wave Blaster will play. WB Takke, displays a warning when any of the linked patches is not contained in the same CBK.

When editing a patch, WB Takke does not send all the patches in CBK that contains the patch to Wave Blaster, it only sends the modified patch. So if you are using links, you should use the <u>Post Selected</u> <u>CBK</u> command on Tools menu to update the linked patches.

Wave Blaster can play up to 32 notes at a time so be careful when you use links, every note you play may count as 2, if two patches are linked. Also if those patches are based on two samples rather than one, every note will count as 4. (Strictly speaking, this is true when both patches note-range include the note.)

You may see the link and base samples of patches in a CBK using WB List utility. This utility can take file name from command line, can be run stand alone or within WB Takke by two commands on Tools menu. <u>Run CBK Lister</u> runs WB List (or another CBK Lister program you may have) and <u>List Selected CBK lists</u> the selected CBK using WB List. The list is displayed by notepad. You may save the text file from notepad if you like, or actually the temporary file is deleted as soon as notepad displays it.

By the way, the tools menu includes Run Mixer command, which runs the mixer application.

Using WB Takke

MIDI Configuration

First time you run WB Takke, you will have to make the MIDI configuration, which is also available later by <u>MIDI Configuration</u> command on Options menu. MIDI Configuration consists of simple answers to two dialogs. If you have a Sound Blaster correctly installed, you dont have to worry about your answers. Default selections will be correct, just press OK button twice to close the dialogs.

MIDI in configuration is not really necessary, for Wave Blaster is an output device. But if you have an external MIDI device, a MIDI keyboard or a MIDI guitar, connected to your Sound Blaster, you will be able to test your patches using the device connected rather than by mouse.

You should choose **SB16 MIDI In** for input device and **SB16 MIDI Out** for output device, which should be the default selections anyway. There is no way WB Takke can detect a Wave Blaster so if you dont have one or select the FM synth on your Sound Blaster as the output device, test gadgets may seem to work but you will not be able to hear any test sounds from Wave Blaster. While you may edit CBK files even with the wrong output device configuration, it will not be too efficient.

Limitations you should now know

WB Takke is designed to modify an existing patch residing in an existing CBK file. It can not create a CBK or a patch from scratch. So you have to select a CBK file first and then a patch to modify. You may simply want to copy any CBK with a different name to work on or create a new CBK with selected patch numbers using WB Panel. You will not want to lose the originals.

The other limitation imposed by WB Takke is that you can not change the patch number. This approach is taken because ability to modify patch number may result in duplicated patch numbers in CBK or lost links and easily made mistakes.

Standard Operation

When you start WB Takke with an empty command line, you will be prompted to choose a CBK file. After that you will be prompted to choose a patch to edit. WB Takke works on patches rather than CBK files and this ensures the most efficient memory usage. You can use commands on file menu to select another CBK, another patch from the selected CBK or save the patch.

(You may specify the CBK filename on command line. When you do so, you will be only prompted to select a patch when WB Takke starts.)

Parameters menu contains commands to open dialog boxes for changing parameters. Test menu contains commands to display test gadgets and play an optional MIDI file.

Usually, you will open a parameter dialog box, change a parameter and then use test gadgets to see (or actually hear) the effect of the parameter change on the patch. Then you will change and test until you are satisfied with the sound. Last step is saving the patch. You may also want to open patches to see how some effects are created.

Parameter Dialogs

These are modeless dialog boxes (except the <u>Name</u> dialog) that enable you to change the parameters of the current patch. You may hear what the modified patch sounds like by using an external synth or using the test gadgets immediately after modification. If you do not save the modified patch all changes to the original will be lost.

Test Gadgets

Four of the test gadgets interact with mouse and simulate Aftertouch, Key press and release, playing notes with different velocities, Pitch Bender and Modulation Wheel controllers. Graphs are static gadgets and respond to parameter changes. Also by playing a MIDI file which uses current patch, you can hear the modified sound in song context.

Select CBK File

When WB Takke starts, it prompts for a CBK file to be selected. You may change the selected CBK file using this command. <u>Load Patch</u> command will use the patches in selected CBK file.

Load Patch

Unless selected CBK file contains only one patch, this command is enabled and lets you choose a patch to edit. This command displays a dialog box listing all the patch names in the selected CBK. Patch number of the current selection is also displayed. If base is 0 then patch numbers will be in 0-191 range, if base is 1 then patch numbers will be in 1-192 range. You can toggle the base value by pressing Base=X button, where X is the current base. Base value will also be used when displaying the patch number in Links and Ranges dialog.

You may change the selected CBK file, by selecting another with <u>Select CBK File</u> command.

Save Patch

This command saves the current loaded patch into the selected CBK, that is into the same file it is loaded from.

Notes:

In case an error occurs during the save operation, it may help to know how WB Takke saves a patch.

- **1.** A new file named WBTAKKE.TMP is created in CBK files directory. Patch is saved to this file.
- **2.** Original CBK file is deleted.
- **3.** WBTAKKE.TMP is renamed to the original CBK file name.

You need free disk space at least double the length of CBK file at the same write-enabled disk that contains the directory in which CBK file resides..

Exit

This command terminates WB Takke.

Contents

This command runs Windows Help and displays WBTAKKE.HLP (this file).

About

This command displays a dialog box containing copyright and version information.

List Selected CBK

This command displays information about selected (current) CBK using WB List.

Run CBK Lister

This command runs the CBK Lister application. WB List is the default CBK lister application. If the application can not be run, you will be prompted to choose a new path and file. You may also choose another application by editing WBTAKKE.INI file which should be in your Windows directory.

Post Selected CBK

This command sends all the patches contained in the selected (current) CBK file using WB Post. If you are editing a patch that has links to other patches, by posting patches in the CBK file, you will be able to hear the correct linked sounds during testing.

Run Mixer

This command runs the Mixer application. SB16WMIX.EXE is the default Mixer application. If the file can not be run, you will be prompted to choose a new path and file. You may also choose another application by editing WBTAKKE.INI file which should be in your Windows directory.

Test Gadgets Moveable

This command toggles between **Test gadgets moveable** and **Test gadgets not moveable** modes. If test gadgets are moveable, it will be indicated by a checkmark.

When test gadgets are moveable, you will be able to move the test windows (Keyboard, Staff, Graphs...) using the mouse. You may move test windows by dragging when the mouse cursor on the gadget window is a standard arrow.

You will usually want to use **test gadgets moveable** mode only when you are personalizing the test gadgets window positions. After you are satisfied and feel comfortable with the positions, make sure that <u>Save Settings on Exit</u> command has a checkmark and close WB Takke.

Patch Changed Warning

This command toggles between **Patch changed warning on** and **Patch changed warning off** modes. If Patch Changed Warning is on, it will be indicated by a checkmark.

When Patch changed warning is on, a message box will be displayed if you have modified the loaded patch, have not saved it and it is likely that information will be lost if you continue. You may choose to save the patch or continue without saving. (A warning will not be displayed if you have modified and restored parameters)

MIDI Configuration

This command displays MIDI in configuration and MIDI out configuration dialog boxes. You may choose the MIDI devices that will be used by WB Takke.

Default selections should be OK, so when in doubt just press OK twice to close the dialog boxes. You may also cancel the dialog boxes by closing them using the system menu Close command.

You may need to make MIDI configuration if WB Takke is not able to open any of the selected devices or WBTAKKE.INI file is missing. If another program using Wave Blaster is running when you start WB Takke, WB Takke may not be able to open the output device (Wave Blaster).

Selected Output device is not guaranteed to be used when testing by playing a MIDI file. This option uses the default device rather than forcing the output to Wave Blaster.

MIDI configuration is not considered as a standard setting and will be saved as soon as possible.

See Also: Using WB Takke

Save Settings on Exit

This command toggles between **Save settings on exit** and **Do not save settings on exit** modes. If settings will be saved on exit, it will be indicated by a checkmark.

If Save settings on exit mode is active, standard settings will be saved to WBTAKKE.INI file when WB Takke normally terminates. (If the termination is due to an error, settings will not be saved!)

Standard settings include: Test window positions and their visibility state, Parameter dialog positions and their visibility state, Test gadgets moveable mode state, Patch changed warning mode state, Base value and main WB Takke window position, size and state (maximized, minimized or normal).

Saved standard settings will be restored next time WB Takke is run.

Name

This command displays a dialog box. You may change the patch name by typing a name up to 12 characters.

Links and Ranges

Sound programs are arranged as banks which consist of 192 patches on Wave Blaster. Each patch can be linked to a maximum of three patches. In the event that a note is played using current patch, linked patches simultaneously play the note. (Note however, while providing richer timbres, linking may decrease polyphony) MIDI note range that programs and its links respond to, can also be limited between desired notes to achieve a program-splitted keyboard or any layered configuration.

Patch

Current patch name and patch number are displayed here for informative purposes.

Note ranges

First and last notes, including themselves, define the range. Any value between lowest (C0) and highest MIDI notes (G10) is allowed, though first note must be lower than or equal to last note, for the range not to be an all-silent one.

Links

Indicates linked patches or displays **none** if no link is present. Linked patches should be found in the same CBK file, else WB Takke gives a warning message and cancels the link temporarily.

Sampled Sources

Every patch keeps parameters for two sampled sources. Parameters for the two are independent and identical. Only one of them can be examined and altered at a time here. Pressing buttons **source 1** or **source 2** provides the switch.

Sample

This parameter primarily characterizes the instrument timbre. Musical instruments, waveforms and percussive elements are available. You may pick among 255 samples/drum kits stored in ROM (Read Only Memory). If **none** is selected, the source becomes inactive.

First and Last note

The MIDI note range that each source responds to can be adjusted here individually.

Loop start

Considering memory limitations, sampled sounds are usually packed as two separate parts, where second part is looped after first part is processed. Occasionally, the first part may grow longer than desired. Increasing loop start parameter, this can be avoided. It controls the degree that the unlooped part is shortened.

Transpose

Increases or decreases note number by half-note steps. For example a value of 12 causes the source to play 1 octave higher than the actual note.

Detune

Increases or decreases the frequency in fine steps. Maximum value here is 127, which in effect equals to transposing the note by a half-tone.

Pan

Determines the sources stereo position (balance between the left and right speakers). Sound can be adjusted to 15 positions, from hard-left to hard-right.

Chorus depth

This parameter controls the depth of chorus or phaser-like effect applied to the sound.

Polyphonic

Determines if the source behaves polyphonic or monophonic. That is, whether more than one note can be played at the same time or not. Solo instruments might sound more realistic when monophonic option is selected, while polyphony is essential for polyphonic instruments like piano or guitar.

Reverse

When this option is selected, only the unlooped part (mentioned above) of the sample is played backwards, creating bizarre effects.

Parameters below define the volume envelope (loudness against time) of the sound. You may monitor the envelope shape from the test gadget <u>sampled source graph</u> while altering the parameters in real-time.

Delay

Adjusts the duration which the sampled source pauses before starting to produce sound. This delay is commonly utilized to create a time gap between the two sources.

Volume

Adjusts the volume level at the end of attack time and during sustain.

Attack time

Adjusts the time required for the sound volume to reach the level specified by the Volume parameter. If set to zero, the sound starts with a sudden attack.

Sustain time

Adjusts the duration that the sound sustains (its volume endures at a constant level) after attack.

Decay time

Adjusts the duration that sound decays (its volume decreases down to decay level) after sustain.

Decay level

Adjusts the level that sound volume remains constant after decaying is completed. This level is preserved till note is off.

Release time

Adjusts the time required for the sound volume to reach zero, after note is released.

Hold

When Hold parameter is active, parameters above which define the volume envelope become ineffective and predefined values for each sample are used.

Modulation Sources

Modulation sources can be described as generators which do not produce sound, but are able to change sound parameters during sound output. Provided are three modulation sources for each patch. Two of them are low frequency oscillators (LFO) that generate waveforms like sinus or triangle. The other is the auxiliary envelope, a one-shot generator whose level against time can be defined. The connection between sound parameters and modulation sources are defined by <u>secondary modulation</u> parameters.

LFO1 and 2

Waveform

Determines LFO's waveform. Options are random, triangle, sinus, sawtooth and square waveforms.

Frequency

Adjusts LFOs frequency, the rate of vibration.

Delay

Adjusts the duration that the LFO waits before oscillating.

Randomize

Adjusts the degree that the LFOs frequency vary randomly with each new note.

Amplitude

Adjusts LFOs amplitude, the peak level. Negative values turn the waveform upside down.

Auxiliary Envelope

Parameters of the auxiliary envelope is similar to the sampled source volume envelope, except that the initial level can be negative. You may monitor the auxiliary envelope shape from the test gadget <u>auxiliary</u> <u>envelope graph</u> while altering the parameters in real-time.

Delay

Adjusts the duration that the auxiliary envelope generator waits at zero level before starting to produce the envelope.

Attack time

Adjusts the time required for the envelope level to reach the level specified by the Attack level parameter.

Attack level

Adjusts the envelope level at the end of attack time. If attack time is zero, this parameter becomes the initial level.

Sustain time

Adjusts the duration that envelope level stays unchanging after attack.

Decay time

Adjusts the duration between envelope levels decay start and decay end level.

Decay level

Adjusts the level that envelope stands still, after decaying is completed.

Release time

Adjusts the time required for the envelope level to reach zero, after note is off.

Primary Modulations

When a note is played on a MIDI keyboard or another MIDI input device, this event is notified by two attributes: note number and key velocity. They report which note is played and how hard the key is struck. Primary modulations allow these attributes to initially effect the sound. For example when key velocity is associated with the sampled sources volume, sound becomes louder as the key is struck stronger. It is possible to form up to 6 associations here. You may associate same source with multiple effects, or same effect with multiple sources.

Source

Determines source of the effect, which can be note number or key velocity.

Effect

Determines the effect. A list of effect types are displayed to choose from.

Depth

Adjusts depth (intensity) of the effect. Negative values cause opposite effect.

Secondary Modulations

Secondary modulations determine the effect of various MIDI controllers and internal <u>modulation sources</u> on the sampled sources.

SOURCES

Pitch bend left/right

The activity of **pitch bend controller** on a MIDI keyboard or another MIDI input device. It is usually left/right movement of the joystick or a separate wheel located elsewhere.

Mod Wheel up - Mod Wheel down

The activity of **modulation wheel** on a MIDI keyboard or another MIDI input device. It is usually up/down movement of the joystick or a separate wheel located elsewhere.

Channel aftertouch

Pressure exercised on a key on a MIDI keyboard or another MIDI input device.

LFO1, LFO2, Auxiliary envelope

Internal modulation sources.

EFFECT TYPES

Determines the effect. A list of <u>effect types</u> are displayed to choose from. Effect intensity of MIDI controllers are defined in <u>general settings</u>.

Effect Types

Effect types are presented as combinations of modulation types and destination. They are common in both <u>primary modulations</u> and <u>secondary modulations</u>,. However not all combinations work, such as controlling pan with LFOs.

Effects applied to sampled sources

Frequency: Increases or decreases frequency of the specified sampled source.

Volume: Increases or decreases volume level of the specified sampled source.

Attack time: Increases or decreases attack time of the specified sampled source.

Decay time: Increases or decreases decay time of the specified sampled source.

Release time: Increases or decreases release time of the specified sampled source.

Loop start: Increases or decreases shortening amount of unlooped part of the specified sampled source.

Pan: Controls volume balance of the specified sampled source among right and left speakers. **Lowpass:** Increases or decreases lowpass filtering effect applied to the specified sampled source. Applying low pass filter softens the sound.

Effects applied to modulation sources

LFO Amplitude: Increases or decreases amplitude of the specified LFO.

LFO Frequency: Increases or decreases frequency of the specified LFO.

Auxiliary envelope attack level: Increases or decreases attack level of the envelope.

Auxiliary envelope attack time: Increases or decreases attack time of the envelope.

Auxiliary envelope decay time: Increases or decreases decay time of the envelope.

Auxiliary envelope release time: Increases or decreases release time of the envelope.

General Settings

Mod wheel up and down intensity

Adjusts the intensity of 'Modulation wheel' MIDI controller as a secondary modulation source.

Aftertouch intensity

Adjusts the intensity of **'Channel after touch** MIDI controller as a secondary modulation source.

Pitch bend

Adjusts the intensity of **'Pitch bend** MIDI controller as a secondary modulation source. In the case that it is associated with sampled source frequency, 6 *tone* means maximum pitch bend will be one octave. If *Global* option is selected, the value set in *WB Panel* becomes effective.

Damper pedal

Defines the function of 'Damper pedal MIDI controller.

Velocity curve

Defines the relation between key velocity and sound volume. None means a linear relation and other types are illustrated in a graphical format here. If Global option is selected, the value set in *WB Panel* becomes effective.

Scale type

Defines the relation between note number and note frequency. *Standard* setting is the logarithmically divided 12-note musical scale.

Keyboard

This menu command toggles the visibility state of the *Keyboard* test gadget. If the gadget is visible, it will be indicated by a checkmark.

Keyboard test gadget

Using this gadget with your mouse, you can play all MIDI notes (C0-G10) available. This gadget looks like a giant 10 octave synth with some buttons on top and a keyboard at the bottom.

Playing a note

If you press the primary mouse button, when the mouse cursor is over the keys of the keyboard gadget, the note corresponding to the key will start playing. At this instance:

If you release the mouse button over the keyboard, while mouse cursor is still a hand, the note will stop.

If you release the mouse button over any other place, the note will continue to play, at least a note off message will not be sent to Wave Blaster. You may continue playing other notes. To stop all notes currently playing, press secondary mouse button when the mouse cursor is over the keys (and is a hand).

Moving the gadget

If Test gadgets are moveable (which is controlled by <u>Test Gadgets Moveable</u> command), then you may move the gadget by pressing primary mouse button while the mouse cursor is an arrow and is not over any of the buttons but over the gadget, then moving the outline to desired place. The gadget will be moved after you release the mouse button.

Buttons

WB Takke does not have a toolbar but you may use the buttons on the keyboard test gadget for the same functionality. Each button command corresponds to a menu command. Below, the button commands are listed from left to right:

Select MIDI File

<u>Play MIDI File</u> (Note: If a MIDI file has not been selected, this button acts as the Select MIDI File button first, then plays the MIDI file.

Run Mixer Name Links and Ranges Sampled Sources Modulation Sources Primary Modulations Secondary Modulations General Settings

Version 1.0 notes

The worst thing about the *Keyboard* gadget is that it does not display a visual hint about the current playing notes. This feature will be implemented in another version.

Velocity and Aftertouch

This menu command toggles the visibility state of the *Velocity and Aftertouch* test gadget. If the gadget is visible, it will be indicated by a checkmark.

Velocity and Aftertouch test gadget

This gadget lets you play the last played note with different velocities and test the Aftertouch effect. Also velocity value you set here will be used by other test gadgets.

Playing notes with different velocities

When mouse cursor is over this gadget and shaped like a triangle, pressing the primary mouse button will cause the last played note to be played with the velocity corresponding to the position of the mouse cursor. Far left of the gadget corresponds to 0, and far right of the gadget corresponds to 127. You can change the velocity value without releasing the mouse button. The change will not be reflected by the playing note but last set value will be used by other gadgets. Playing note will stop after you release the mouse button.

Testing the Aftertouch effect

When mouse cursor is over this gadget and shaped like a triangle, pressing the secondary mouse button will cause the last played note to be played (using last set velocity value and 0 for Aftertouch value) and mouse cursor to be placed at the far left of the gadget. By moving mouse cursor without releasing the mouse button you can effectively change the Aftertouch value for the note. A value of 127 will simulate a very hard press on the key. Playing note will stop after you release the mouse button.

Moving the gadget

If Test gadgets are moveable (which is controlled by <u>Test Gadgets Moveable</u> command), then you may move the gadget by pressing primary mouse button while the mouse cursor is an arrow and over the gadget, then moving the outline to desired place. The gadget will be moved after you release the mouse button.

Joystick

This menu command toggles the visibility state of the *Joystick* test gadget. If the gadget is visible, it will be indicated by a checkmark.

Joystick test gadget

This gadget lets you simulate and hear the combined effects of *Pitch Bender* and *Modulation Wheel* controllers. Moving the joystick on the horizontal axis works like a Pitch Bender controller and moving the joystick up-down simulates Modulation Wheel controller. Effects of these controllers on the sound is set using the parameters under the <u>Secondary Modulations</u> heading.

Using Joystick gadget

When the primary mouse button is pressed on this gadget (while the mouse cursor is a diamond), last played note will start playing. The note will be effected by Pitch Bender and Modulation Wheel controllers. You can hear the combined effect of both controllers by moving the mouse cursor without releasing the mouse button, which stops the sound. Center of the gadget correspond to a value of 0 for both controllers.

Moving the gadget

If Test gadgets are moveable (which is controlled by <u>Test Gadgets Moveable</u> command), then you may move the gadget by pressing primary mouse button while the mouse cursor is an arrow and over the gadget, then moving the outline to desired place. The gadget will be moved after you release the mouse button.

Staff

This menu command toggles the visibility state of the *Staff* test gadget. If the gadget is visible, it will be indicated by a checkmark.

Staff test gadget

Using this gadget you may play one note at a time. Note range is limited but selectable.

Playing a note

Over the gadget, mouse cursor will have the shape of a quarter note as defined by standard musical notation. Pressing primary mouse button will cause corresponding note to start playing, releasing the mouse button will stop the note. If you keep CTRL pressed while starting the note, it will be played half-tone sharper.

Selecting note range

You may select the staff range by pressing secondary mouse button over the gadget and choosing the desired range from the menu. Note that range value for the staff will not be saved and will always be set to C5-G6 when WB Takke starts.

Moving the gadget

If Test gadgets are moveable (which is controlled by <u>Test Gadgets Moveable</u> command), then you may move the gadget by pressing primary mouse button while the mouse cursor is an arrow and over the gadget, then moving the outline to desired place. The gadget will be moved after you release the mouse button.

Graphs

Sampled Sources Graph and Auxiliary Envelope Graph menu commands toggle the visibility state of the Graph test gadgets. If the gadget is visible, it will be indicated by a checkmark.

Graphs

Graphs will be updated as the parameters change. Red line indicates the level after decay is over but before the note off message (key release). If key is released (note off message is sent) before decay is over, current level is preserved.

Sampled Sources graph

Displays an approximation of first and second <u>Sampled sources</u> time versus sound level (volume) graph.

Auxiliary Envelope graph

Displays an approximation of <u>Auxiliary Envelope</u> time versus envelope level graph.

Moving Graph gadgets

If Test gadgets are moveable (which is controlled by <u>Test Gadgets Moveable</u> command), then you may move the gadgets by pressing primary mouse button while the mouse cursor is over a gadget, then moving the outline to desired place. The gadget will be moved after you release the mouse button.

Select MIDI file

This command displays a dialog box where you can select a MIDI file to be played using $\underline{\text{Play MIDI File}}$ command.

Play MIDI file

This command plays the MIDI file selected using <u>Select MIDI File</u> command. You will not be able to continue normal processing while the file is playing. A mouse button press or ESC/Space will stop the music.

MIDI file will be played using MCI so output device may not necessarily be Wave Blaster. (You may be able to change output device from MIDI Mapper.) You can actually play a WAV file with this command if one is selected. (File extension is used to differentiate the file type)

Usually, you will select and play a MIDI file that is using the patch you are editing so that you can hear the sound in song context.

Keyboard Shortcuts

Keyboard is not intentionally supported by WB Takke, but following shortcut/accelerator keys are available:

| F1 | Help |
|---------|--------------------------|
| F2 | Select CBK File |
| CTRL+F2 | Save Patch |
| F3 | Load Patch |
| F4 | Play MIDI File |
| F5 | Links and Ranges |
| F6 | Sampled Sources |
| F7 | Modulation Sources |
| F8 | Primary Modulations |
| F9 | Secondary Modulations |
| F10 | General Settings |
| F11 | Run CBK Lister |
| F12 | Run Mixer |
| CTRL+1 | Keyboard |
| CTRL+2 | Velocity and Aftertouch |
| CTRL+3 | Joystick |
| CTRL+4 | Staff |
| CTRL+5 | Sampled Sources Graph |
| CTRL+6 | Auxiliary Envelope Graph |
| CTRL+M | Select MIDI File |
| CTRL+L | List Selected CBK |
| CTRL+P | Post Selected CBK |
| CTRL+N | Name |

Sample Files

A number of sample MIDI files (composed by GoRGoN programmers) are included in the WBTakke package, namely:

| TAKKE-1.MID | TAKKE-2.MID | TAKKE-3.MID | TAKKE-4.MID |
|-------------|-------------|-------------|-------------|
| TAKKE-5.MID | TAKKE-6.MID | TAKKE-7.MID | TAKKE-8.MID |
| TAKKE-9.MID | TAKKE-A.MID | TAKKE-B.MID | TAKKE-C.MID |
| TAKKE-D.MID | TAKKE-E.MID | TAKKE-F.MID | TAKKE-G.MID |
| TAKKE-H.MID | WBTAKKE.MID | | |

The sample CBK file, WBTAKKE.CBK provided contains original patches created by GoRGoN. For the MIDI files listed above to play *exactly* as intended by us, you should first send this CBK file to Wave Blaster using WB Post utility, since these MIDI songs have been composed with the new patches in mind.

WBTAKKE.CBK contains the following patches:

| Stereo Piano | Acoustic Piano. Note number is associated with |
|--------------|---|
| | stereo position, providing flying notes in full stereo. |
| Arpeggio | Acoustic guitar with long release time, suitable for |

| | arpeggio style. |
|-------------|--|
| Feedback | Distorted electric guitar with short attack for leads, and a surprise. Also you can use Modulation Wheel down (Joystick down) controller for a slight mute effect. |
| Funk Slap | Genmidi Slap Bass with a minor difference: Base sample 2 is changed to Electric Guitar from Rock Bass. |
| Round Bass | Soft electric bass with no annoying pick sound, suitable for bass moves. |
| Quartet | Combined violin, viola, cello and contrabass in one compact patch. |
| Beauty | Double choir. Smooth connections can be achieved with joystick-down controller. |
| Introlink1 | Used as Intro link. |
| Intro | Deep intro sound combining strings, choir and trumpet. Most effective for long chords. |
| TakkeDrums1 | Main drum patch, containing bass drum, claps, and various snare drum sounds. The remaining instruments are achieved using three patch links. |
| TakkeDrums2 | Drum link 1, containing acoustic snare drum and toms. When snare drum is played softly, its attack time increases. |
| TakkeDrums3 | Drum link 2, containing hi-hat and crash cymbal. Hi- hat sounds are set to be monophonic, so when you play closed hi-hat, open hi-hat is muted as it is supposed to be. Also, using after touch controller, the crash cymbal can be muted. |
| TakkeDrums4 | Drum link 3, completes the drum kit for general MIDI compatibility. It contains remaining cymbals and standard percussive drums. Also, the second sampled source is unused, available for future enhancements |

Uninstalling WB Takke

Uninstalling WB Takke is simply deleting installed (copied) files from your hard disk. There is only one exception to this: A file named WBTAKKE.INI will be created in your Windows directory when WB Takke is first run. This file should also be deleted.

Files in the directory where WB Takke is installed:

WBTAKKE.EXE or for the unregistered version WBTAKKED.EXE (Main Executable) CTL3DV2.DLL (This is version 2 of the popular library that can reside in application directory) *.MID (Sample MIDI files that use patches from WBTAKKE.CBK. See <u>Sample Files</u> for a complete list)

WBTAKKE.CBK (Sample CBK file)

README.TXT (Information for the first time user)

WBTAKKE.HLP (Help file for WB Takke - actually you are viewing it right now!)

File in your Windows directory:

WBTAKKE.INI (Initialization file, created even if WB Takke has executed once.)