SoundTower Software

BLACK BOX SE

User Guide.

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professional support for:

M-AUDIO

BLACK BOX[™]

guitar performance | recoding system

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BLACK BOX SE HELP PAGES CONTENTS

1.	INTRODUCTORY NOTES	4
2.	SYSTEM REQUIREMENTS	4
3.	CREDITS	4
4.	STARTING EDITOR FOR FIRST TIME	5
5.	INITIAL EDITOR SET UP	6
6.	MIDI SETUP	6
7.	RECEIVING USER BANK DATA	8
8.	TRANSMITTING USER DATA	9
9.	CHANGING PRESET PARAMETERS	9
10.	SELECTING PRESETS FOR EDITING OR AUDITION	10
11.	COPY & PASTE FUNCTIONS FOR PRESETS	12
12.	TEMPLATES	14
13.	PARAMETER CHANGE SENSING	17
14.	GLOBAL SETTINGS	18
15.	WRITING/SAVING PRESET TO BLACK BOX	19
16.	DRUM SEQUENCE (NOT CURRENTLY IMPLEMENTED)	20
17.	CONTINUOUS CONTROLLER MAPPER	21
18.	KEYS	23
19.	PRESET LIBRARIAN	24
20.	HELP/WEB SUPPORT	32
21	MIDLIMPLEMENTATION NOTES	33

INTRODUCTORY NOTES

The SoundTower BLACK BOX Sound Editor is an exciting product for the ST team. This effort has become the effective starting point for our new look and strengthening position in the Editor/Librarian segment of the MIDI market. We are proud of the new direction in GUI, the robust engine and the range of functions implemented with great success. We would like to offer our heartfelt thanks to our customers who work the software so much harder and creatively than we ever could imagine doing. As a result many valuable enhancements to in our software over the years have been added, many valuable suggestions for improvements in functionality and interface have added greatly to our success.

We hope the SoundTower Editor/Librarian adds value to your enjoyment of M-Audio's BLACK BOX.

Thank you and happy picking from the SoundTower team.

SYSTEM REQUIREMENTS

- Windows 95 / 98 / ME / 2000 / XP
- Mac OSX
- * Black Box OS software version 2 or higher.
- (Optional) Midi Interface IN/OUT
- (Optional) Mouse with scroll wheel for easy and precise parameter adjustment

CREDITS

Software Development: SoundTower Software, Windsor, Ontario, Canada.

User Guide Development: Derek Prowse.

STARTING EDITOR FOR FIRST TIME

When starting the SoundTower Black Box editor for the fist time you will be greeted by a splash screen:



User will then be prompted by a dialogue box requesting your name and registration code.

Registration codes are sent to you usually within 12 hours of purchase of product. Point your browser to:

http://www.soundtower.com/blackbox/

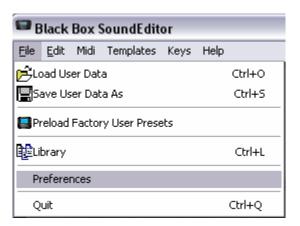
and follow the PayPal or 2CheckOut links.



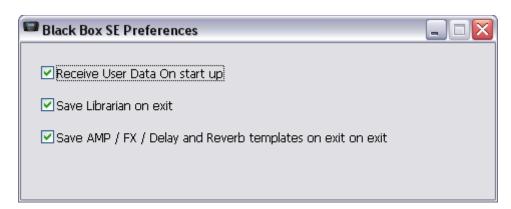
Enter the codes if you have obtained them or click "Demo Mode" to continue in demonstration mode. The Send and Writing of Patches will be disabled but the basic functionality is maintained for the purposes of evaluation.

INITIAL EDITOR SET UP

The SoundTower Black Box SE has initial set up preferences that if utilized makes life much easier for the user by virtually eliminating the frustrations of lost data, editor setup and patch organization. Under main menu select Preference under File.



The Preferences dialogue window offers several options for user:

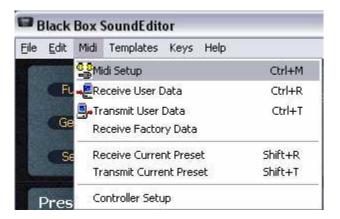


that sets editor startup and shut down preferences. They are as seen above. Any or all can be selected or de-selected depending on your particular editing needs.

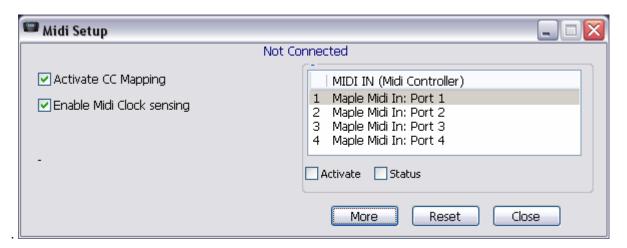
MIDI SETUP

Even though your Black Box editor connects with BB automatically - no port selection is necessary providing that BB is connected to the computer via USB, you may want to arrange a different configuration or MIDI port routing. This next section will walk you through the necessary steps.

Under MIDI in main menu (Ctrl-M):



User accesses Midi setup window:



Select the MIDI IN that is desired based on list provided by system. By clicking on the "More" button all MIDI IN and MIDI OUT ports and MIDI emulators are listed:



All ports are listed: physical, virtual as well as emulations as demonstrated above with Microsoft GS Wavetable SW Synth listed.

RECEIVING USER BANK DATA

To receive all user data from BLACKBOX, select "Receive User Data" from Midi menu

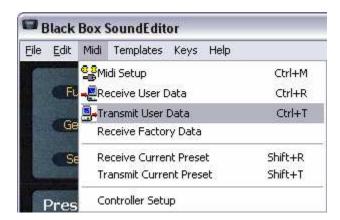


or use **Ctrl+R.** and press start. Because of the use of USB protocol with the BLACK BOX there should be no problems with Midi interface not keep up with fast coming Midi messages as there used to be but if this does occur because of a system slow down you can adjust timing by adding delay in milliseconds.



TRANSMITTING USER DATA

To transmit User Data from the Editor to BLACK BOX select "Transmit" from Midi menu.



The data you send will be written into BLACK BOX bank memory overriding existing Presets and Drum sequence. Transmitting bank data takes little bit longer than Receiving because the editor has to wait till BLACK BOX performs actual writing to its flash memory and sends the "Ready" message.



CHANGING PRESET PARAMETERS

Changing preset parameters is very simple. You can use on-screen knobs, computer up/down arrow keys to increase or decrease values by 1. If your mouse is equipped with a scroll wheel, you can simply move mouse cursor over a control, or its label, and scroll; the knobs will self adjust. While using a mouse wheel, you do not have to click on any controls to change values.

SELECTING PRESETS FOR EDITING OR AUDITION

After Receiving User Data, the preset names are displayed in "Preset Bank" section.

BLACK BOX does use

patch names and patch names are stored in BLACK BOX internal memory.

(Note: The editor's patch names are limited to 6 characters.)

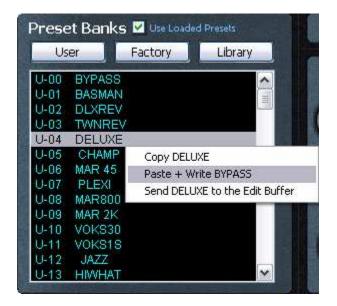


Of course you can rename Preset by double clicking on list box cell and typing a new name into the pop-up.



The Preset bank section can be used not only to select and display BLACK BOX's internal presets but also to perform Preset copy/paste functions.

With a single right click on patch name a small edit popup menu will appear:



If you use paste function from window's Edit menu, the copied Preset will be pasted to Black Box's edit buffer without writing it to the user bank.

From this you may make these following selections:

- **Copy** command copies selected Preset to editor's clipboard.
- Paste + Write sends and saves copied Preset to BLACK BOX
- Send to Buffer sends copied Preset to BLACK BOX's edit buffer without writing it to the user bank.

If you use copy function from window's <u>E</u>dit menu, the edited Preset will be copied. If you use paste function from window's <u>E</u>dit menu, the copied Preset will be pasted to Black Box's edit buffer without writing it to the user bank.

COPY & PASTE FUNCTIONS FOR PRESETS

To further increase functionality of the editor we added separate Copy and Paste functions for preset grouped parameters. This way for example you can copy all effect settings from one Preset and seamlessly apply it to another.



For instance if you a have selected the preset called BYPASS and want to copy and paste the AMP parameter values go to the AMP panel and click on "Edit"



From the drop down menu select copy or Amp Template.

Selecting Copy will sends the parameters to Clipboard for Pasting to other Patch's Amp grouped parameters you might select next. In the case below we have selected Deluxe as the patch and are set to Paste Amp parameters from BYPASS. Restated: simply Copy one Presets Amp settings, change to another Preset and click on Edit label, select Paste Amp and the current Amp settings will be over written with contents of the clipboard.



The Template feature is a powerful form of librarian that is meant to help organize sub groupings of parameters.

Each of:

- Amp
- Delay
- FX and
- Reverb

are groupings of parameters that are naturally associated for the purposes of the function described.

For any technical information relating to the Black Box hardware please see M-Audio Black Box User guide for more details on setup, functionality and specifications.

(See MIDI IMPLEMENTATION NOTES section (p. 33) in this User Guide for URL)

TEMPLATES

By way of example we shall focus on the Amp settings Template.

If you had selected the Amp Template with DLXREV you will open another window that will have a mirroring control panel. You will also note a list box and a blue label above that to the left of the control panel. The Preset Amp setting that was active in the main window will be displayed in the Amp Template window.

By clicking on the Add Current button you will add

Black Box's Template feature is most valuably viewed as an extension of the patch Librarian feature. Its power lays in the User's ability to fine tune any of Amp, FX, Reverb or Delay parameters incrementally without loosing the previous changes during exploration.

the Amp settings to the list box. You may note that the list box names consist of:

- 1. template number (the number order of Amp template addition),
- 2. the name of the Preset the Amp settings were derived (in the case below: BYPASS) and
- 3. the number and name of the actual Amp setup saved (below: 2. DLXREV). (see image)



The text in the list box may be renamed by clicking on the name in the list box and typing a new name in the blue label above it after the original name appears in label.

A useful feature of the Template is its real time connection with the main editor. Once you have added the Amp setting to the list box you can make adjustments with the knobs in the Template

screen (these changes will be reflected in main editor) or on the Amp portion of the main editor screen and the changes (and changes there will be reflected in the Amp Template screen).

By clicking Add Current again a new entry to the list box will be made with the Preset and Amp effect name from the editor used again. Each change of the amp settings and addition to the list box are separate entities. If you then successively click each of the entries in the list box you will note that the different settings are remembered and displayed in the Template field and in the main editor Amp field.

A useful feature of the Template is its real time connection with the main editor. All changes in either are immediately mirrored in the other.

In this manner you can experiment with the settings of the module and not lose the original or interesting setting made.

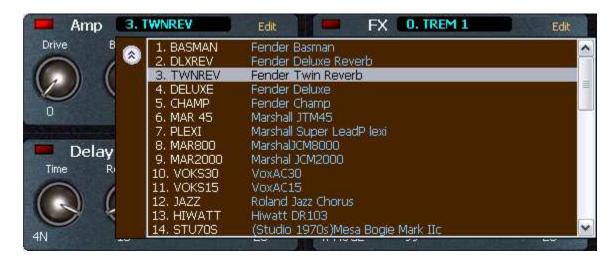
Preset grouped parameter functions are:

- Copy/Paste of Effect section
- Copy/Paste of AMP section
- Copy/Paste of Delay section
- Copy/Paste of Filter Sequence

Templates can be accessed through main menu as well:

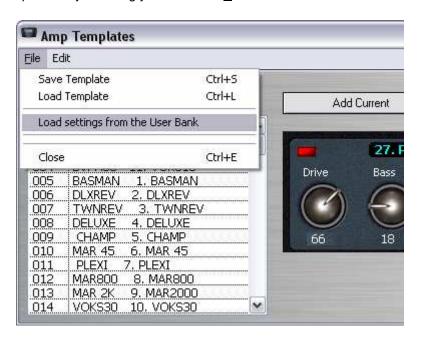


The grouped parameters utilize a drop down menu for selection activated by clicking on the name labels in each panel. Staying with the AMP section if the label is single clicked a list is presented to choose the AMP type effect desired. In this case TWNREV is selected.



Note that there is a small toggle button (with the two Chevrons) that will expand the list width wise to display more information about the parameter. Above we see that the TWNREV is equivalent to the Fender Twin Reverb. The selection must be clicked again, or the user must click on the main screen, to set the parameter selection into active use by the editor. This allows for browsing without immediate commitment prior to final selection.

The Template option also allows for loading all Amp parameter groupings from the entire User Bank. This can be accomplished by directing you mouse to File under the main menu:

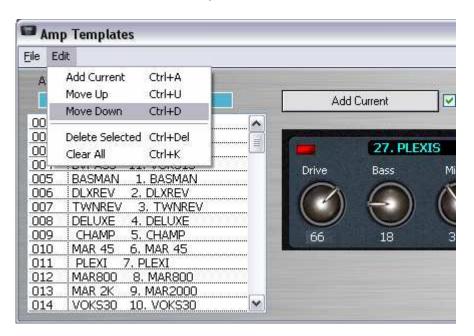


The Template option also allows for loading all Amp, Reverb, FX and Delay parameter groupings from the entire User Bank.

Selecting Load settings from the User Bank will extract all Amp settings from the currently loaded User Patches.

You may, after arranging, changing names and making all adjustments to individual setups, save your Template set as a separate file (Ctrl-S). Previously saved Template files are loaded by menu or Ctrl-I

Under Edit in main menu there are given options to move, delete and otherwise arrange the Amp settings saved in the list box to accommodate your needs:



PARAMETER CHANGE SENSING

This feature has been added to the editor allow for immediate updates to the editor when manual changes are done on BLACKBOX. It allows for display of the parameter(s) change. Its function is to automatically request Preset and Drum Beat edit buffers in 1sec time interval. Click the button when you want the sensing to commence. The function is operational when the button has turned to dark blue and the label text changes to light blue from yellow (below).



The PARAMETER CHANGE SENSING feature causes immediate updates to the editor when a manual change occurs on the Black Box.

GLOBAL SETTINGS

The global settings are independent of any preset or Drumbeat setting. Here you can adjust the main output level, balance between Drum Beat output level and processed Input signal, Noise Gate, Global Tempo.



A common feature of the BLACK BOX SE drop down box selections is the ability to select a parameter with a single click and without making it the final choice. One click to select and a second click to finalize it. You can also click anywhere else on the interface to final select the parameter.

See image below for example:

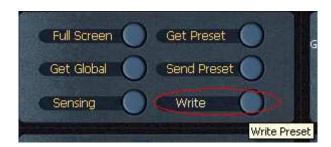


Popup menus: One click to select and a second click to finalize selection.

WRITING/SAVING PRESET TO BLACK BOX

Use <u>WRITE</u> button to save edited Preset to BLACKBOX. In the "Write..." dialog you can select current or new target location within the user bank.

WRITE button is found at the top left panel of the editor, as shown in image below:



From the Edit menu you can select Write or use ctrl-W, as shown in image below:



Either manner of engaging the WRITE function will activate the WRITE window:



In the blue label the Preset name can be changed. Here BYPASS was changed to BVPASS for illustration purposes.

The "Write..." dialog lets User select <u>current</u> or <u>new target location</u> within the user bank.

Clicking Send Preset sends the current patch to the edit buffer. Clicking Get Preset calls the current patch from the edit buffer. These are found in the same panel as <u>WRITE</u> (below).



DRUM SEQUENCE (not currently implemented)

(NOTE: THIS FEATURE IS NOT CURRENTLY IMPLEMENTED IN THE BLACK BOX OS. WE INCLUDE THIS DESCRIPTION IN ANTICIPATION OF FUTURE IMPLEMENTATION BY MANUFACTURER.)

The Drum Sequence section (bottom left corner of Editor) of the main editor's screen shows Drum Beat linked to a current Preset with some parameters (Tempo, Send to FX level, signal sent to Delay, Input and Reverb.

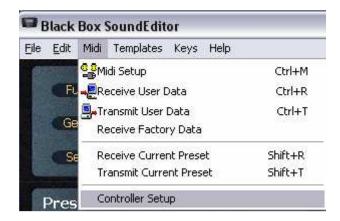


To change linked Drum Beat from the main editor screen simply move your mouse over the Drum Beat name label and use mouse scroll wheel or click and select from popup window's list box.

You will notice the Edit label that, when clicked, brings up a Drum Beat Sequencer window. This will give a sense of what the editor is potentially capable of.

CONTINUOUS CONTROLLER MAPPER

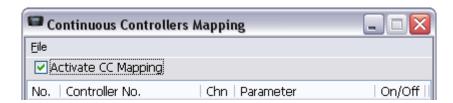
Under Midi in main menu select "Controller Setup" (as shown below)



The CONTINUOUS
CONTROLLER MAPPER
allows for complete
mapping flexibility
between parameters,
channels and
controllers.

In the Continuous Controllers Mapping window you are given several options for control.

You will see five columns.



- The No. column is fixed as it's function is organizational only
- · Controller No.,
- Chn (MIDI channel),
- Parameter columns,
- And On/Off.

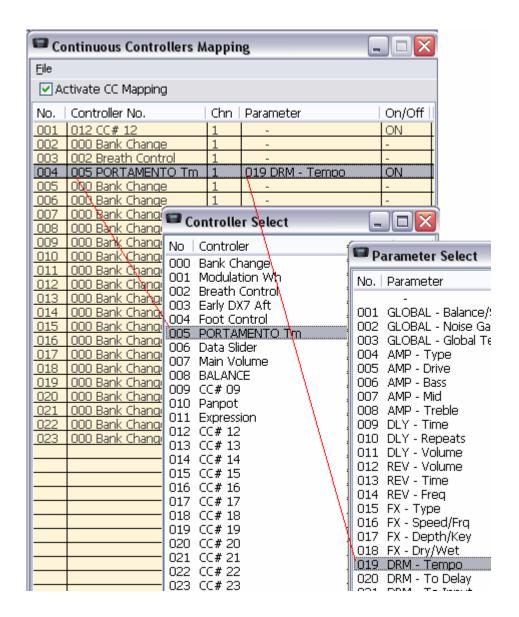
The check box allows for activation of the Continuous Controllers Mapping in a global sense. If not checked, none of the assignments will be active. If checked then the assignments with the On/Off column set to ON will be active.

When Controller No., Chn or Parameter columns are clicked a list window opens for you to select parameters from.

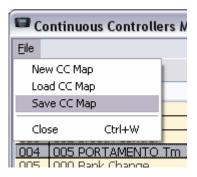
Click once to highlight, (you can browse without committing) and a double click to select.

In the example below:

No. selection 4 is set with **Controller No.** 5 (Portamento Tm) controlling **Parameter** 19 (DRM – Tempo) through **Chn** (MIDI channel) 1. You will note that at the far right there is a further logical control column that allows for setup to be active (ON) or inactive (OFF). This is activated by a single click to toggle between ON/OFF states.



In the Continuous Controllers Mapping window menu you have the option of creating New, Loading saved or saving created maps.



KEYS

The Keys function is found under the Keys menu item or by typing ctrl+k. This function, once activated (as indicated by a check mark to the left of the Keys On menu item) will allow for single touch activation/deactivation of the selected parameter. This is designed for live performance or recording situations where time is of the essence for quick effects changes.



KEYS function is used for single touch activation/deactivation of the selected parameter.

Used for live performance or recording situations where time is of the essence.

PRESET LIBRARIAN

Here is where you can really thrive as a BLACK BOX user. It will pay to familiarize yourself with all Librarian features. Our Librarian lets you store unlimited number of BLACK BOX sounds. In addition you can have as many Library files on your computer as you want. Each item stored in the library consists of one Preset and one Drum Beat that was linked to a Preset. This way you never have to worry about losing your favorite BLACK BOX settings. The Librarian provides for you 32 sound categories to organize your sounds and to have them available for immediate use. Initially, we named some categories like "Pop", "Rock" but you are welcomed to rename them according to your styles or needs.

Accessing the Librarian is as simple as clicking the LIBRARY button,



It will pay to familiarize yourself with all Librarian features. Our Librarian lets you store unlimited number of BLACK BOX sounds.

A **single click** will set the list box below to the contents of the "Cat 0 – Not Assigned" category already in the Librarian (a **second click** will open the Librarian window itself). If you have opened a new library or this is the first time you have accessed the function since installing the BLACK BOX SE then the listbox will be empty.

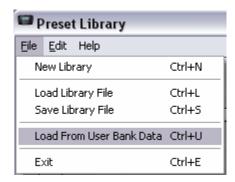


and the Librarian window will open but will be initially unpopulated (below)



You can use the Librarian to build a set of Patches from those you are working on in the Editor currently or by sensed changes from the BLACK BOX by clicking the <u>Add Current</u> button.

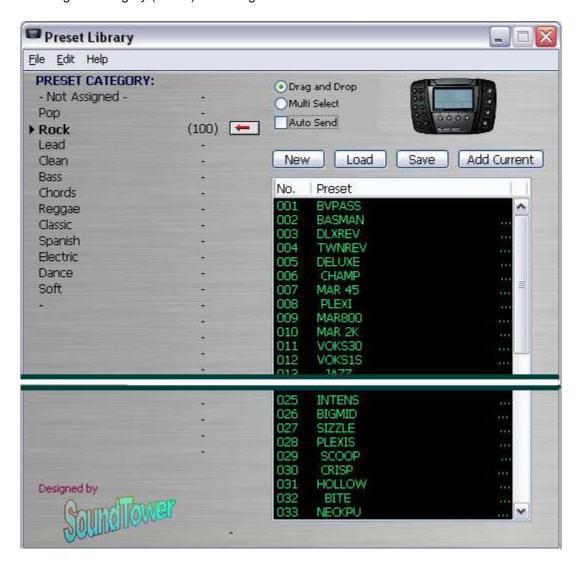
The other option is to load a pre-existing Library from your hard drive or Load from User Bank Data.



The Librarian is used to build a set of Patches from those in Editor currently or by pulling from the BLACK BOX by clicking the <u>Add Current</u> button.

Another option is to load a pre-existing Library from your hard drive or Load from User Bank Data.

For the next example we shall load in User Bank Data. This results in all patches being dropped into the Not Assigned category (Cat. 0) See image below.



Adding Preset to the librarian

To add current Preset select a category to which you want to add and press the "-" beside the category to move the arrow button:



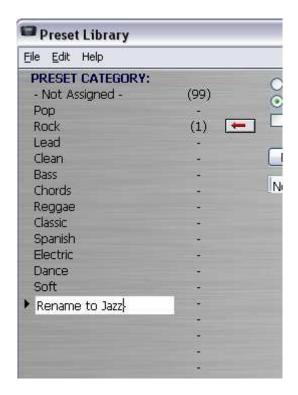
Now if we select 004 TWNREV (by clicking once to highlight) to be moved from Not Assigned to Rock:



After clicking the arrow we should see the total number of Preset remain the same but the relative distribution between categories adjust. Here we see 99 in Not Assigned and one in Rock. Also note the list box has adjusted itself making the next preset in the list, DELUXE, move from 005 spot to the now vacant 004.



All categories can be renamed. In the image below, after the right pointing black triangle to the left of empty category field was clicked once and rename category is selected from the Librarians File menu, we create a category Jazz. You must hit keyboard Enter to set the name.



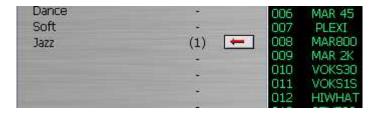
Naming and re-naming new and existing Preset Categories is as simple as clicking the black triangle and retyping.

Remember: press enter on keyboard to set name change.

A single click on the JAZZ preset and you select it for movement to the new category by clicking the arrow button.



Note that the HIWHAT at 013 position moves to the 012 cell after the move is complete.



You man also simply drag and drop with the mouse if Drag and Drop radio button is selected:



Note also that if the Multi Select option is checked (see below)



it is a simple matter of highlighting a range of preset with a drag of the cursor or select non-congruent individual presets by ctrl + click



Note that 5 presets were selected and 5 show up in the category. The other category the presets were taken from adjusts automatically to new value of 95.

Remember: Any preset or group of presets in the list box can be selected and copied by Copy menu option in Edit in Librarian menu.

Any preset or group of presets in the listbox can be selected and copied by Copy in Edit in Librarian menu. The selected group can then be Pasted by using the Paste in Edit in menu to copy the selection, with altering the original set of presets, to another category.

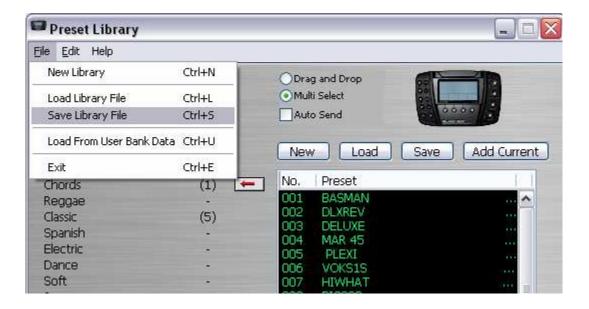


Renaming of Presets can be accomplished in Librarian simply by double clicking and typing in box:



In this way the Librarian can be used to select and sort the entire Preset banks for more functionality suited to the individual musician.

Saving and loading previously saved Librarian setups are accomplished through the <u>File</u> menu; New Library option is also accessible here as well as on the Librarian main face by way of the buttons.



HELP/WEB SUPPORT

Although we have provided this PDF help file/User Guide it is possible to find yourself in the position that you are using the Black Box executable on a computer without access to the files. For this reason we post these files on our website. Under Help in the main menu you can access the Black Box page (Ctrl-H) and On-Line Help page by clicking on selection.



If in the unlikely situation that you cannot find the information you need on our Black Box page or in the On-line Help pages please email us at:

editors@soundtower.com

Please ensure you put "Black Box Technical Support" in the subject line.

Enjoy your Black Box and this editor! Thanks from the SoundTower team.

www.soundtower.com/blackbox

MIDI IMPLEMENTATION NOTES

MIDI implementation in M-Audio's BLACK BOX is USB driven so the perennial problems associated with MIDI drivers being incompatible for various systems are eliminated. SoundTower Software has taken advantage of this hardwired strength associated with the USB system but cannot take responsibility for USB issues that might arise within the BLACK BOX itself. For this M-Audio would be the best resource.

SoundTower Software URL for the software:

http://www.soundtower.com/blackbox

This help file in ADOBE .pdf and MS-Word .doc formats can be found there.

An online HTML page with this information is found at:

http://www.soundtower.com/blackbox/help

M-Audio URL for the BLACK BOX:

http://www.m-audio.com/products/en_us/MAudioBlackBox-main.html

Technical specs are found:

http://www.m-audio.com/products/en_us/MAudioBlackBox-focus.html

Updates for drivers are found:

http://www.m-audio.com/index.php?do=support.drivers