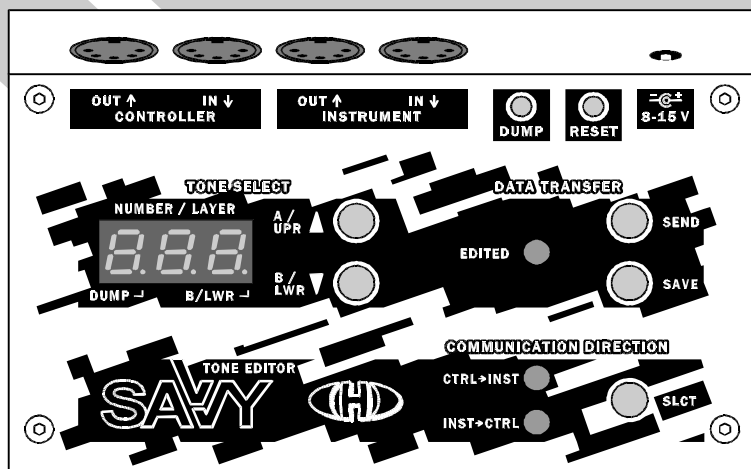# SAVVY

Tone Parameters
Editor & Controller

Tone Memory Organizer
(Support Software User Guide)
rev. 2.3

Contents:

1   FEATURES

As a support for the users we have made the software utility to organize tones in memory of the SAVVY editor. It enables to rename, to relocate and to initialize a single tone in SAVVY's memory. Also whole tone bank (block of 128 tones) can be copied, exchanged or initialized. The utility allows:

- Relocation of tones → an individual tone can be moved (relocated) to any other position in the memory without any changes of the tone name or parameters.
- Renaming of tones → an individual tone can be renamed without any changes of the tone position or parameters.
- Initialization of tones → an individual tone can be replaced with the initial tone (tone name and parameters are replaced with default data).
- Copying of a tone bank → a whole tone bank (128 tones) can be copied to another one.
- Exchanging of a tone bank → contents of a two tone banks (128 tones) can be exchanged.
- Initialization of a tone bank → content of a tone bank (128 tones) can be replaced with the initial data.

2   PREPARING

2.1   INSTALLATION

The organizer is based on Java scripts so it can run on any computer with a web browser (Windows, OSX, etc.)[1].

Visit our website and download the "**syxorg_210.zip**" archive. Expand the archive to a selected folder on your computer's hard drive (i.e. "**index.html**" file and complete "**data**" sub-folder).

The **Tone Memory Organizer** works with Bulk Dump System Exclusive messages in plain text format only. So you will also need an utility to send / receive the text[2] as a MIDI SysEx dump if your DAW doesn't allow to process the text format of System Exclusive messages directly (see chapter 6 in SAVVY's supplement manuals for recommended software[3]).

2.2   CONNECTION OF SAVVY

To work with the SAVVY's Tone Memory Organizer, you must connect the SAVVY editor to your PC/DAW with both CONTROLLER IN and OUT MIDI cables (fig. 1).

Figure 1-a

Figure 1-b

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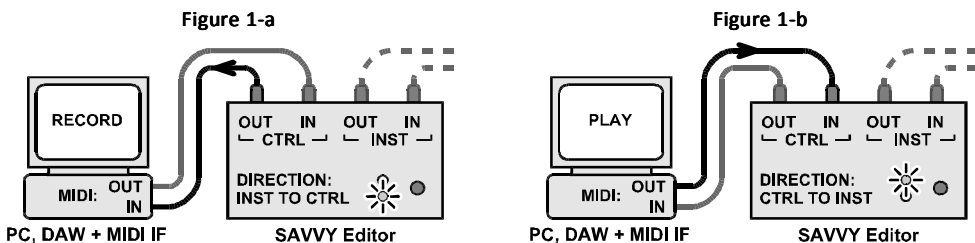
[1] Note that scripts and ActiveX elements must be enabled in web browser for proper function of the generator.
[2] The used format of the messages is **text.** The text can not be saved as a *.syx or *.mid file directly, hence a text to SysEx utility is needed.
[3] It is not necessary to use the recommended utility. The same function is provided by various DAW and MIDI SysEx softwares. For required text format and instructions check the documentation of your DAW/software.

3

3   USAGE

3.1   ORGANIZER WINDOW OPENING

To launch the organizer utility, simply open the downloaded "**index.html**" file in your web browser (by clicking on the file icon). The instrument selector window opens (fig. 2).

Click the "**Open**" button (arrow in right column of the index table) of the requested instrument to launch the organizer window.

The organizer window consists of two tables (see fig. 3):

- Upper table controls the organizer functions and shows actual status (the "**Tone Memory Organizer**").
- Lower table shows actual names of all tones in the SAVVY's tone memory (the "**Complete Tone Library**").

There are three links in bottom row of the upper **Tone Memory Organizer** table:

- **Reset** link clears all text fields and returns all select boxes to their default values.
- **Index** link closes the window and returns to instrument selector window.
- **Help** link opens new window with brief help.

Figure 2

3.2   DATA LOADING

3.2.1   Data from SAVVY's memory

You can backup the data from SAVVY's memory (see fig. 3).

1. Connect SAVVY with your PC/DAW as shown on fig. 1.
2. Prepare your PC/DAW for recording of SysEx data in plain text form (see chapter 2.1).
3. Press the SLCT button on SAVVY's panel so that yellow INST->CTRL LED lights (see fig. 1-a).
4. Press the DUMP button on SAVVY's panel and record transmitted stream of SysEx messages in the PC/DAW.
5. Open the recorded data **as a text** (i.e. F0...F7 F0...F7 ... F0...F7 stream).
6. Copy the recorded data (e.g. with clipboard - CTRL+C / CTRL+V) to "**Complete memory content Bulk Dump stream**" text field ① in upper section of the organizer table.
7. Click the "**Check Data**" button ②[4]. "**WAIT!**" instruction appears for a moment – the data are being checked.
8. After successful data check, the "Data OK" message in the "**Status**" line ③ indicates successful loading of the data[5].
9. The "**Device ID**" box ④ shows identification number[6] used in the SysEx messages.
10. The **Complete Tone Library** table ⑤ shows names of all tones in the SAVVY's tone memory.

Figure 3

Instrument name

Input / output data

Tone(s) processing

Bank(s) processing

Links

Complete list of all tones

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[4] It is absolutely necessary to click the button. No next user action is allowed without this!
[5] If the data are incorrect, type of error is specified in this line.
[6] See description of "Select Device ID for Bulk Dump" system parameter in Manual Supplement of your instrument.

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3.2.2 Data from archived file

You can also work with previously archived plain text data (see fig 3).

1. Open the archived text file in a text editor and copy them (e.g. with clipboard - CTRL+C / CTRL+V) to "**Complete memory content Bulk Dump stream**" text field ① in upper section of the organizer table (fig. 3).
2. Click the "**Check Data**" button ②[7].
3. The "Data OK" message in the "Status" line ③ indicates successful loading of the data.
4. The **Complete Tone Library** table ④ shows names of all tones in the SAVVY's tone memory

3.3 SINGLE TONE PROCESSING

3.3.1 Tone relocation / renaming

1. Select the tone[8] to be edited with the "**Tone Nr.**" select-box ① or with the "**-/+**" buttons ② in "**Source Tone Data**" section of the organizer table (see fig 4).

2. The "**(Bank Nr.)**" and the "**(Pgm Nr.)**" boxes ③ show corresponding Bank Select and Program Change numbers (see chapter 5.4.1).

3. The "**(Name)**" ④ box shows the name of the selected tone and the "**(SysEx data)**" ⑤ box shows the Bulk Dump Load type MIDI SysEx message of the selected tone.

4. Select the target location (number)[9] of the edited tone with the "**Tone Nr.**" select-box ⑥ or the "**-/+**" buttons ⑦ in "**Target Tone Data**" section of the organizer table. If you do not want to move the edited tone, but only rename it, select the same tone number in "**Target Tone Data**" section as the number of edited tone in "**Source Tone Data**" section.

Figure 4

5. The "**(Bank Nr.)**" and the "**(Pgm Nr.)**" boxes ⑧ show corresponding Bank Select and Program numbers (see chapter 5.4.1).

6. Write new name of the edited tone to the "**Write New Name**" text box[10] ⑨ and press Enter on the PC keyboard. If you do not want to rename the edited tone but only to move it, click the "**Copy Name**" button ⑩ - the original name of edited tone will be used.

7. The MIDI SysEx message with the edited data is shown in the "**(Bulk Dump SysEx Data)**" box ⑪.

8. Click the "**Save Changes**" button ⑫.

9. The changed data are written to the the original stream of SysEx messages ⑬. "Tone changed!" status message ⑭ confirms the operation. The "**Complete Tone Library**" table with all tone names is also actualized.

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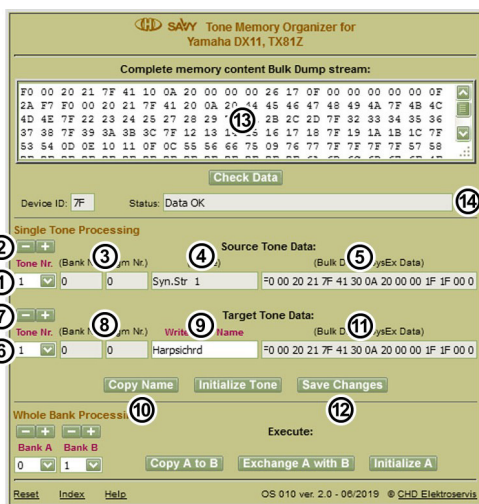
[7] It is absolutely necessary to click the button. No next user action is allowed without this!

[8] The source tones are always numbered from 1 independently on setting of the SAVVY's Tone Number Format global parameter.

[9] The target tones are always numbered from 1 independently on setting of the SAVVY's Tone Number Format global parameter.

[10] Length of the name (number of characters) and used character set are limited by the instrument options. Longer inserted text will be shorten and unknown characters will be replaced with space. See also chapter 5.3.

3.3.2 Tone initialization

1. Select the tone[11] to be initialized with the "**Tone Nr.**" select-box ① or with the "**-/+**" buttons ② in "**Target Tone Data**" section of the organizer table (see fig 5).

2. The "**(Bank Nr.)**" and the "**(Pgm Nr.)**" boxes ③ show corresponding Bank Select and Program Change numbers (see chapter 5.4.1).

3. Click the "**Initialize Tone**" button ④.

4. The default tone data are written to the "**(Name)**" ⑤ box and the "**(Bulk Dump SysEx data)**" ⑥ box (i.e. MIDI SysEx message) of the target tone.

5. Click the "**Save Changes**" button ⑦.

6. The initialized data are written to the original stream of SysEx messages ⑧. "Tone changed!" status message ⑨ confirms the operation. The "**Complete Tone Library**" table with all tone names is also actualized.
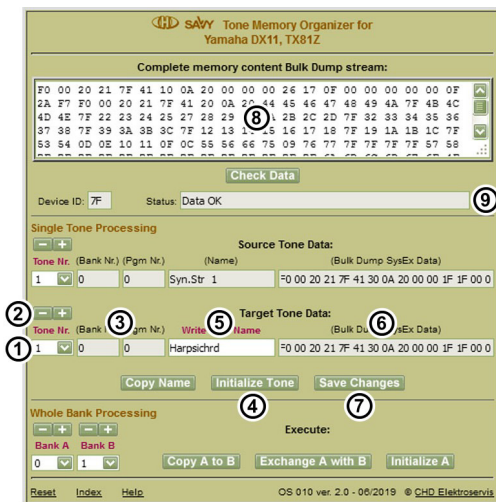
3.4   BANK PROCESSING

Besides a single tone processing, the organizer allows working with whole tone banks, i.e. block of 128 tones (see fig 6).

3.4.1 Copying bank content

1. Select source bank number in the "**Whole Bank Processing**" section of the organizer table with the "**Bank A**" select-box ① or with the "**-/+**" buttons ②.

2. Select target bank number in the "**Whole Bank Processing**" section of the organizer table with "**Bank B**" select-box ③ or with the "**-/+**" buttons ④.

3. Click the "**Copy A to B**" button ⑤. Click the **OK** button in confirmation window (newly opened small window).

4. Content of the source bank **A** is copied to the target bank **B**. The source bank **A** remains unchanged.

5. The changed data are written to the the original stream of SysEx messages ⑧. "Bank changed!" status message ⑨ confirms the operation. The "**Complete Tone Library**" table with all tone names is also actualized.

Figure 5

Figure 6

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[11] The target tones are always numbered from 1 independently on setting of the SAVVY's Tone Number Format global parameter.

6

3.4.2 Exchanging bank contents

1. Select number of the first bank to be exchanged in the "**Whole Bank Processing**" section of the organizer table with the "**Bank A**" select-box ① or with the "**-/+**" buttons ②.

2. Select number of the second bank to be exchanged in the "**Whole Bank Processing**" section of the organizer table with "**Bank B**" select-box ③ or with the "**-/+**" buttons ④.

3. Click the "**Exchange A with B**" button ⑥. Click the **OK** button in confirmation window (newly opened small window).

4. Original content of the first bank **A** is written to the second bank **B** and original content of the second bank **B** is written to the first bank **A**.

5. The changed data are written to the the original stream of SysEx messages ⑧. "Bank changed!" status message ⑨ confirms the operation. The "**Complete Tone Library**" table with all tone names is also actualized.
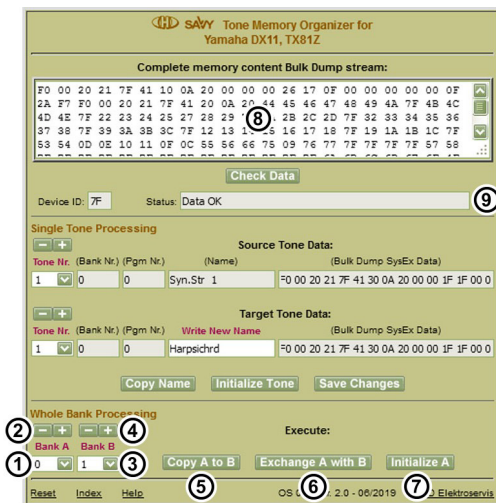
3.4.3 Initializing bank

1. Select target bank number in the "**Whole Bank Processing**" section of the organizer table with the "**Bank A**" select-box ① or with the "**-/+**" buttons ②.

2. Click the "**Initialize A**" button ⑦. Click the **OK** button in confirmation window (newly opened small window).

3. Content of the target bank **A** is replaced with initialization data – the same default tone is loaded into all positions of the bank.

4. The changed data are written to the the original stream of SysEx messages ⑧. "Bank changed!" status message ⑨ confirms this. The "**Complete Tone Library**" table with all tone names is also actualized.

3.5   DATA SAVING

After all tones / banks are processed as required, the new data should be saved so that they are not lost. The data can be saved as a plain text file in your PC or they can be sent back to SAVVY's memory.

3.5.1 Archiving data

1. Open new (blank) file in a text editor on your PC.

2. Copy the "**Complete memory content Bulk Dump stream**" text field in upper section of the organizer table (① on fig. 3) to the blank text file (e.g. with clipboard - CTRL+C / CTRL+V).

3. Save the text file as a plain text (*.txt file) in your PC.

3.5.2 Saving data to SAVVY's memory

1. Prepare your PC/DAW for SysEx data sending.

2. Copy the "**Complete memory content Bulk Dump stream**" text field in upper section of the organizer table (① on fig. 3) to the SysEx editor of your PC/DAW (e.g. with help of clipboard - CTRL+C / CTRL+V).

3. Interconnect SAVVY with your PC/DAW as shown on figure 1.

4. Press the SLCT button on SAVVY so that green CTRL->INST LED lights (fig. 1 b).

5. Transmit the SysEx data from PC/DAW to SAVVY.

4   RECOMMENDED MIDI SOFTWARE

The MIDI SysEx messages as plain text in hexadecimal form are required for working with the **Tone Memory Organizer**. It cannot process a *.syx or *.mid file directly, hence a text to SysEx capable utility or DAW is needed.

Pocket MIDI[12] is a utility that can be used to send / receive the SysEx message as text. **Pocket MIDI** is a simple MIDI monitoring tool for both Windows and Mac OSX platforms. It is a freeware for commercial, non-profit or private use.

4.1   SETTING UP THE COMPUTER AND SOFTWARE

1. Download the **Pocket MIDI** utility at **https://www.morson.jp/pocketmidi-webpage/**
2. Install the utility in your computer.
3. Select the MIDI interface **Outputs** to device where the interface is connected to[13] (drop-down menu **Views → MIDI Settings → Input Port / Output Port**).
4. Connect the computer with the SAVVY (accordingly to the fig. 1)[14].
5. Send and receive required SysEx messages to / from the SAVVY.

4.2   SEND THE TEXT SYSEX DATA

Basic procedure to send any SysEx data to SAVVY (see fig 7):

1. Generate required SysEx message in the **Tone Memory Organizer** (as described above).
2. Highlight text in the "**Complete memory content Bulk Dump stream**" text field and copy it to clipboard (CTRL+C).
3. Paste the clipboard (CTRL+V) to "**System Exclusive**" window of **Pocket MIDI** ①.
4. Click the "↑" ("**Transmit**") arrow ② to send the data to SAVVY (see chapter 3.5.2).
5. The sent message appears in the "**MIDI Out Monitor**" window ③.
6. Alternatively you can save the file for future use (either by the floppy icon ④ as a *.txt file or in the drop-down "**File**" menu ⑤ as a *.pocketmidi file).

Figure 7 – Pocket MIDI for data sending

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[13] Computer's MIDI interface must be active / switched on and all necessary MIDI drivers correctly installed.
[14] MIDI cable from interface's MIDI output to computer's MIDI input is not necessary for "Load" type messages but it can remain connected. There is no need to disconnect it.

4.3 GET THE TEXT SYSEX DATA

Basic procedure to get a SysEx data from SAVVY (see fig 8):

1. Launch the **Pocket MIDI** utility.

2. Perform the tasks described in paragraphs 1. to 4. of chapter 3.2.1.

3. The received message appears in the "**MIDI In Monitor**" window ①.

4. Highlight the text and copy it to clipboard (CTRL+C).

5. Paste the clipboard (CTRL+V) to the "**Complete memory content Bulk Dump stream**" text field of the **Tone Memory Organizer**.

6. Proceed as described in paragraph 7. and next of chapter 3.2.1.

7. Alternatively you can save the file for future use: Copy the data (CTRL+C) from the "**MIDI In Monitor**" window ① and paste them (CTRL+V) to any text editor and save as a *.txt or document file.

Figure 8 – Pocket MIDI for data receiving

9
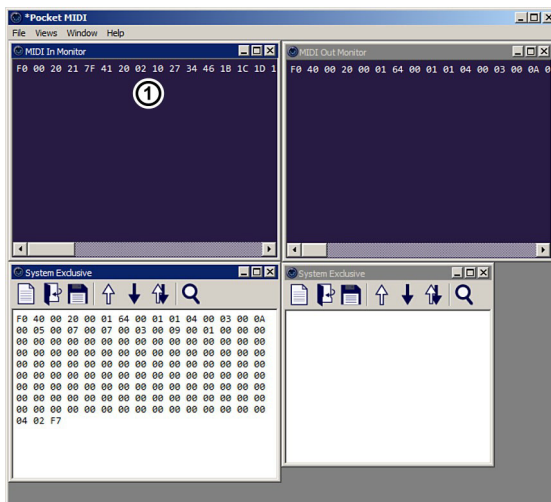
5   APPENDICES

5.1   SUPPORTED OS

The organizer utility works only with data generated by operational system <u>version 2.0 and higher</u> of all supported instruments. The utility doesn't recognize SysEx data of older versions 1.x!

5.2   TONES NAMING

Each of tones in SAVY's memory has its own name. Some instruments do not show the tone name on their display (and they do not allow to edit the name) but individual name for each tone is stored in SAVVY's memory. The organizer utility enables to show and edit the names.

5.3   NAME CHARACTER SET LIMITATION

Character set for the tone names is limited by the individual instrument options.

For operational systems **002** (Alpha Juno 1/2, HS-10, HS-80), **004** (MKS-50), only the following characters are accepted:

Numerals '**0**' to '**9**' (codes 48 [30 hex] to 57 [39 hex]), letters '**A**' to '**Z**' (codes 65 [41 hex] to 90 [5A hex]), letters '**a**' to '**z**' (codes 97 [61 hex] to 122 [7A hex]), '**-**' (dash) character (code 45 [2D hex]) and ' ' (space) character (code 32 [20 hex]).

For operational systems **003** (JX-8P), **005** (JX-10, MKS-70 - Super JX - V4 PWM), only the following characters are accepted:

Numerals '**0**' to '**9**' (codes 48 [30 hex] to 57 [39 hex]), letters '**A**' to '**Z**' (codes 65 [41 hex] to 90 [5A hex]), '****' (backslash) character (code 92 [5C hex]) , '**/**' (slash) character (code 47 [2F hex]) , '*****' (asterisk) character (code 42 [2A hex]) , '**-**' (dash) character (code 45 [2D hex]) , '**.**' (dot) character (code 46 [2E hex]), ' ' (space) character (code 32 [20 hex]) and letters '**a**' to '**z**' (codes 97 [61 hex] to 122 [7A hex]) what are automatically converted to '**A**' to '**Z**' (upper case) letters.

All other instruments (operational systems of SAVVY) use full range of ASCII character set, i.e. all characters with codes from 32 [20 hex] to 127 [7F hex].

5.4   TIPS

5.4.1 Bank Select and Program Change MIDI commands

The "**(Bank Nr.)**" and "**(Pgm Nr.)**" text fields in the organizer table show values of the **Bank Select LSB** (i.e. CC #32) and **Program Change** MIDI commands that can be used to choose the displayed tone during SAVVY editor operation.

5.4.2 Partial SysEx Messages

The "**(Bulk Dump SysEx Data)**" text fields in the "**Source / Target Tone Data**" sections of the organizer table show SysEx messages for one selected tone. You can copy these messages and send them to SAVVY individually to change only one selected tone.

CHD SAVY

Tone Parameters Editor & Controller
Model TPE-1 Nr. 8-361 / Bios v. 1.00
Document: 8361100-23_syxorg

Manufacturer:
CHD Elektroservis, Czech Republic
www.chd-el.cz   info@chd-el.cz

SAVVY

Tone Parameters Editor & Controller