

CENZWORKS2K
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MIDI control Interface

for Yamaha Digital Mixer 01v

User Manual

ver. 3.4



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General warnings

Although quite obvious, remember that being a digital mixer is essential not to put any object on the Yamaha faders to avoid turning it or using this software can hinder their free movement mechanical servo-controlled. As you know, it recalls the last status/faders position reached before the shutdown, and whether they were moved with the mixer off, they back to their last position.

At first use of the software is not recommended to apply input signals to the Mixer Yamaha, and especially to amplify the output signals, although it was tested cannot exclude sudden changes of output due to parameter variations uncontrolled (resonance filters, labels sensitive moving fader to 0dB etc..), then you can start to use it with amplified signals, preferably not at maximum gain.

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Notes on this edition of the Manual

The manual in Acrobat PDF format provides the ability to quickly move through the document by using the links hidden under the chapter headings in the index. In each chapter, in the end, there is a link to the MAIN as [BACK TO GENERAL INDEX](#)

The document is opened in read-only, the changes and saving are disabled.

In software manual buttons are highlighted with the same color with which they appear in the program, eg. MSG DAT1 SELECT IN RECEIVE TRANSMIT RECALL EDIT Title.

The menus are highlighted in gray instead Menu File, Menu MIDI, Menu Visualize, Menu ?.

The buttons on the Yamaha are just "quotes".

The written warnings highlighted in blue are of particular importance.

As always the keyboard shortcuts and individuals keys are enclosed by <> (eg.<CTRL> = control key).

To avoid confusion, the real **Yamaha 01v** Mixer is always called "**Yamaha**" unlike this program (virtual mixer or interface or control panel etc.) referred to simply as "**software**".

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SETUP

The distribution of the setup file takes the form of compressed file (*.rar).

Uninstall any previous program MIDIMixer01v using the uninstaller in Windows (Control Panel / Add or Remove Programs). This operation is not necessary but advisable.

Unrar the file to a temporary folder specially created and that you take note of the position, then run the setup file.

The installation was created with a freeware program "Cyber Installer Suite 2009". It is easily configurable options (language, target folder, an association of *.01v, system rollback (restoring the old files) etc.. The only hassles are slow alerts about the use of program etc.. I pray to ignore it.

Since the current version may be incompatible with files created with earlier versions, please, if necessary use old file and *.01v pref.00v, send them to the software company for their update.

For the same reason is not available a update-setup, as new features were added, folders and files.

Specifically:

- are installed in the windows/system32 folder libraries I/O MIDI **MIDIIO32.ocx**, libraries of controls (faders and knobs), the runtime VisualBasic and some related files
- folder program is created and within it the EXE (**MidiMixer01v.exe**).
- In the same folder are copied two files for the background image and a program file for preferences (**pref.00v**) with attribute "hidden" (viewable only with viewing hidden files and/or system), but not read-only to be modified by the user through the program.
- **Documentation** subfolder is created and within copies the files **ManualeITA.pdf** (italian manual), **ManualENG.pdf** (this document), **SavedParameters.pdf** that lists the parameters currently saved under a patch file and those of the individual libraries, **TabelleImplementazioniMIDI.pdf** that contains the list of parameters of the Mixer implemented and implementable in the future.
- **Patches** subfolder is created containing the default file **Init00Memory.01v** and where other files will be saved patches with the same extension ***.01v**.
- are created subfolders **setups**, **scenes**, **lib** and subfolders of this latter, **eff** (with further subfolder **fxv** where the effects library file **default.fxv** is copied), **eq**, **dyn**. This folder is the default directories for each file opened for writing or reading. Should not be moved or deleted but can be duplicated or nested with others.

All files and folders listed are considered vital to the functioning of the software. If they are corrupt or deliberately removed the software will not work. Such a state will not cause any other problem.

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FIRST SOFTWARE RUN

Getting Started

Screen resolution

The program is intended to be used only with a screen resolution less than 1024 * 768 pixels (16 or 32 bits). Minors resolutions do not allow to view full resizable windows that are not useful.

Higher resolutions may make it difficult to read the text labels.

Possible resolution 1152 * 864, 1280 * 800, 1280 * 960, 1280 * 1024 1600 * 900, 1600 * 1024.

The screen is fully used then, for better resolution of 1024 * 768, you should use the opportunity to automatically hide the taskbar (right click on the taskbar, "Properties", select "Auto Hide", OK.) Or, preferably move inferiorly.

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MIDI: Settings and Yamaha connections

Make **MIDI connections** as follows:

Connect the MIDI OUT of your sound card to Mixer MIDI In and MIDI In the back of the PC to the MIDI Out of the Mixer. If you use a MIDI box you can connect other MIDI devices to MIDI Through of the Mixer that is an exact copy of the MIDI signal from the PC. Turn on the Yamaha. (Do not power amplification!)

Before starting the software, make the following settings on Mixer **YAMAHA**:

1. Press on it the button "MIDI" bring on the first page (MIDI setup). In it select the Tx CH and Rx CH chosen (unless changed by the user they are both in default channel 1).
2. Select (darken) the two columns on the right Tx and Rx.
3. Unselect columns Omni and Echo if needed
4. Press MIDI button repeatedly to bring on the fifth page "LOCAL CONTROL" and make sure to select "ON".

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Start

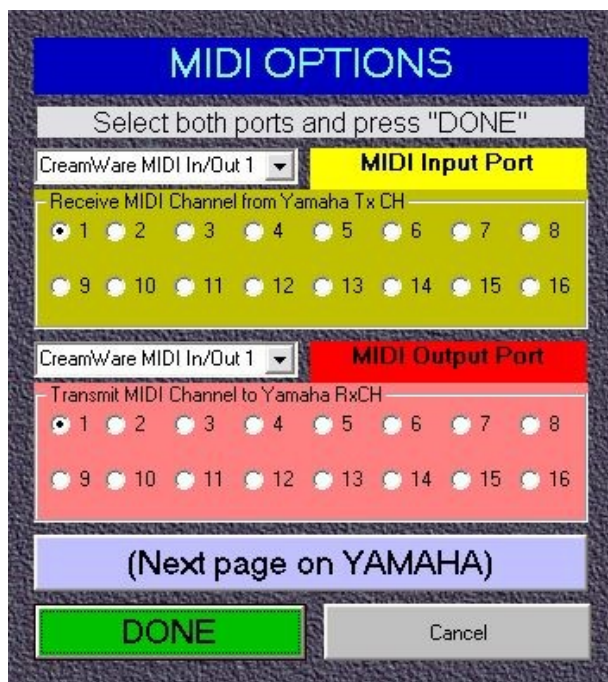
As a first test run is not recommended to connect and switch on the monitor amplified or amplifier to a mixer, always possible to avoid peak signals derived from a lack of knowledge of the software.



Using the shortcut on the Start menu (created with the installation), you start the program that appears with this splash form showing the version number. To continue (the boot does not continue automatically) is enough just click on it or press any key on your keyboard.

Later, in subsequent uses of the software, you can choose not to see more, selecting the item in the menu **Preferences** and saving it, or by enabling the saving of preferences on program exit.

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MIDI options

The window that appears (left) can not be closed until you have selected the MIDI In and Out be used, then activates the "**DONE**" button that finally opens the main window.

By Default in the text boxes drop down on will Displayed the first MIDI devices available. Use that sound card or other virtual (YOKE NT, Microsoft MIDI Mapper etc..)

To exit the program at this time without selecting MIDI ports, press "**Cancel**". The button stops and closes the program. Nothing changes if you reopen the window during program execution.

It 'still possible even after changing the MIDI ports if necessary. In this regard it should be noted that the names that appear in drop-down menu are those of the installed devices (whose drivers are in the system) but has not said they

are currently in memory, that is loaded and available (eg is. The case Creamware cards of the picture, on a Pulsar card whose software has not been loaded yet). In the same case (drivers loaded but not visible) software warns you about incongruous or unavailability of the drivers will still be loaded without restarting either the PC or software. In case of multiple doors, only work is physically connected.

The golden-yellow and pink boxes contain options for selecting MIDI channels using the communication software from/to YAMAHA. By default is select channel 1 for both. **So it's all right is necessary that these settings are made manually also on the Yamaha on the MIDI page** as previously explained. Last opportunity in this window is to send the message to the Yamaha MIDI "next page".

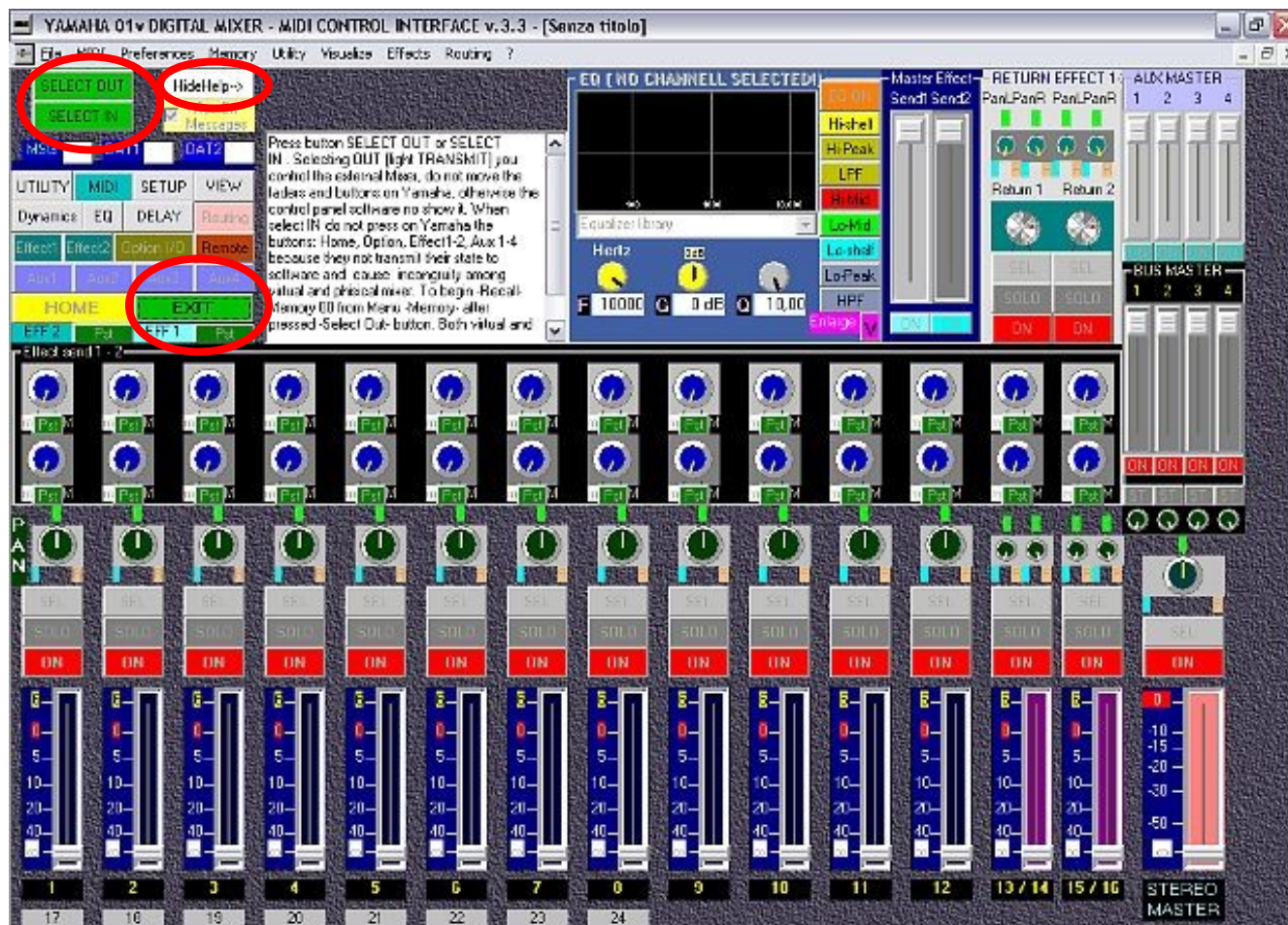
For the reasons set out above is not recommended to use the same MIDI channel selected in the software into other devices or MIDI sequencer.

This window will continue to show itself at every new boot software. If will be saved preferences in the menu preferences(**menu preferences** / **save preferences**) or will you be selected in the same menu **Save preferences on exit** , following startup will no longer need to rerun the selection of ports and channels of transmission, just press <Enter> to continue keeping the options beforehand.

During program execution, as anticipated, you can call the MIDI settings window, without risk, using the menu **MIDI** / **Options** and also through the button **MIDI** in the left main panel.

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Main window



As a result of pressing the button "**DONE**" of previous **MIDI Options** opens the main program as shown in the figure. It follows that as much as possible Yamaha Mixer but contains many commands that only appear on the Mixer display, plus several original utility software.

Be noted immediately is that all buttons are disabled except for:

- **SELECT OUT** (select mode transmission to YAMAHA)
- **SELECT IN** (select mode reception from YAMAHA)
- **Hide Help** (exchanges the contents of the text box between the fast aid and block-notes)
- **EXIT** (end software)
- Most of the menu (active only **File**, **MIDI**, **Pref.**, **Visualize**, **?**)

Following an initial identification of commands, but not yet active.

Down (fully visible only if the bar is not present or hidden programs bar) there are 14 black label channel **1-16** and under 8 grey **17-24** used only if there is an option card for this outs. Above them are the 15 channel faders (1-16 + master), they have on their left dark blue label with the positions in dB (perfectly balanced with the real one). Above the faders have 3 rows of 14 buttons that double as exactly those Mixer Yamaha plus Sel buttons ON and Master. Above them, marked by the label "**PAN**" on left the 17 rotary controls for panning, on Yamaha

Mixer only virtually present in the display "PAN/ROUTING". Still above the 14 channel sends for the two effects. Appear also buttons for selection **PRE** or **PST** fader. Top right, marked with different colors, we find two faders for master effect send, box of 2 effect returns, including the 4 pan, two rotating for the amount of return and 6 buttons Sel, Solo, and On/Off.

In the upper right side, the 4 Master auxiliary faders (AUX1-4) with its on/off and under 4 MasterFader BUS and its on/off. On top center the window for equalization. Al suo fianco sinistro il taccuino in questo momento utilizzato dal Fast Help, un'iniziale aiuto immediato. Detta casella di testo sarà utilizzata anche per la visualizzazione dei messaggi esclusivi . I messaggi di Control Change e Canale saranno invece visualizzabili nel riquadro blu a destra, contrassegnato dalle etichette : **MSG**, **DAT1** e **DAT2** (Channel Message, DATA1 e DATA2). Top left replication of all 17 buttons* existing on Yamaha Mixer with the same label, a button "**EXIT**" to close the program at any time and at the top, circled in red in the image, two essential buttons : "**SELECT OUT** " and "**SELECT IN** ".

* About this panel (top left in the previous figure), all buttons are active, once you set the Transmit mode. Those colored in gray, must be considered currently active only for the poor function of pressure as the corresponding buttons on the Yamaha, that is not yet implemented its functions and not open new windows but do make progress the pages on the Yamaha.

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First operations (Mode Transmit / Receive)

The software is now built with a double but alternative modes of operation that is MIDI-only transmission (Software -> Yamaha) or Receive Only (Yamaha -> software). This was preferred to other possible ways to avoid dangerous conflicts of incoming and outgoing messages contemporaries, perhaps due to transactions made by persons other than software and interface directly on the mixer. Receive mode (indicated by the label **RECEIVE**) disables the software commands and displays the results of operations performed on Yamaha Mixer, conversely Transmission mode (indicated by the label **TRANSMIT**) is not able to disable the controls Mixer real. To select from time to time according to momentary needs, the preferred mode, just press the button "**SELECT OUT**" to transmit data to Yamaha MIDI (the button pressed becomes into label **TRANSMIT** recalling the current state, while the other off) or button "**SELECT IN**" to enable the reception of MIDI data transmitted by Yamaha. The case status change is indicated by the label become **RECEIVE** the button. After the first press of either button (both green and then start with no rules set) is always active either. Pressing the labels **TRANSMIT** and **RECEIVE** has no effect because they are only signals of the status of current mode, only buttons **SELECT OUT** and **SELECT IN** command transmission and reception. In addition to these buttons you can switch from reception to transmission and vice versa even clicking in the menu MIDI the test Transmit or Receive, or finally with the keyboard shortcuts <CTRL+T> (Transmit-SelectOut) or <CTRL+R> (Receive-SelectIn). **IMPORTANT!** The Mixer Yamaha 01v has a few commands and buttons that do not transmit any MIDI message on their status change, this means that it is impossible to see the effect in software mode reception. It's the case with all 17 buttons on the left side of the Yamaha (from Utility to Home). Note that instead they are controllable through software. For this reason is highly preferable, using this software, do not press those buttons on Yamaha, but use in transmit mode, the copies of the software. This is to avoid inconsistencies between the spin on the Yamaha and not display in the software. It is understood that none of the PC or the Yamaha suffer any violations of this rule, being a categorical imperative that adopted by **CENZWORKS2K** not to create never the slightest possibility of damage the Mixer.

Selecting mode **RECEIVE** all controls of software are disabled except: **SELECT OUT**, **FastHelp**, **Wiev ExMessage**, **EXIT**, Menu File, Menu MIDI, Menu Visualize, Menu ?. Others will be rehabilitated and available only by pressing **SELECT OUT** and in this way passing in mode transmission.

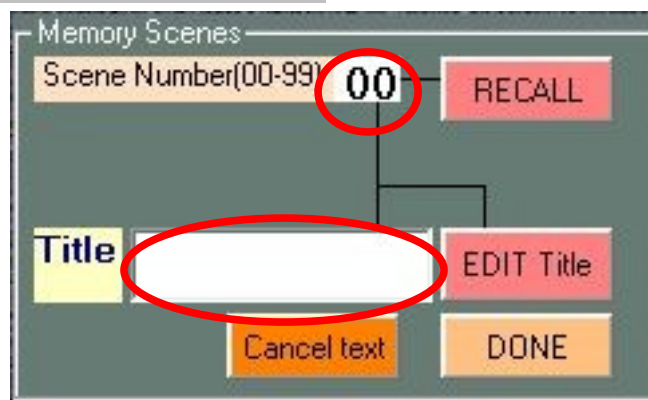
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Scene memories (Recall and Edit title)

As suggested by **fast help** that appears early in the text box at the top left of the main window, it is preferable that the first thing to do after boot program is to "synchronize" the software with the Yamaha. The quotes above are due to the fact that currently the software is not yet able to recognize the current mixer settings online, even when on the Yamaha will open a previously stored scene (in this case the Yamaha only sends a channel message that informs about the scene number and not all parameter values.)

So the synchronization is only recalling the scene 00, that is the scene that can not be changed by Default in the software and in the Yamaha. To achieve this, with transmission mode activated, in **Menu Memory** click on "Recall and Edit Title Scenes" .

The window appears on the right is where you can retrieve the stored scenes on the Yamaha, and easily edit the name. To invoke the default scene 00, preset at the beginning, just press the button **RECALL** , in this way on Yamaha either on software the opening scene is invoked. To invoke another of the 100 available (00-99) simply type the number in the box **circled** in the figure and press the button again. In these cases, as already mentioned, the scene will be called only on



the Yamaha. To edit the name instead (always 8 characters maximum, including any spaces, but the software automatically adds them if necessary and you can not type more) is important first of all make sure that the memory is existing, that is already stored on the Yamaha, to do this just type the number and press recall, if that memory is still empty, the Yamaha did not recall, but, **not yet implemented the functionality of storage memory and instead it is possible to set its name, you may encounter the error of editing the name of an empty memory, an operation carried out with the actual name change, but unfortunately with a random parametric and dynamic approach, which do "crazy" for 1.5 seconds the mixer without causing any damage.** In this case, however, be strongly discouraged, to restore the legibility of the display you must restart the Mixer Yamaha, and then move to the Memory Init 00 and save in the number of corrupt memory, making a copy that is free of defects. In fact you can not erase a memory without write it again.

In short:

- to invoke a memory type in any number and press **RECALL** (if it is still empty, the memory is not recalled, no problem)
- To edit the name of a previously edited memory (even manually on the Yamaha) call it as above and make sure that the mixer has actually called (that is existing, full) [*the same number set in the software should appear in the left of the display of Yamaha*], then type the new name in the box next to Title, and press **EDIT Title** .

These are the characters used and recognized by Yamaha:

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	a	b	c	d
e	f	g	h	i	j	k	l	m	n
o	p	q	r	s	t	u	v	w	x
y	z	(space)	!	"	#	\$	%	&	*
()	_ underscore	`left <ALT+96>	/	:	;	<	=	>
+	,	-	?	[]	' right <ALT+39>	.		~ <ALT+126>

Special characters are available in the software (as in any text editor for Windows) by pressing contemporary <ALT> and its ASCII code number.

The button **Cancel test** only serves to clear the current text of the software without any influence on the Yamaha.

Pressing the button **"DONE"**, only makes the window disappear to use the notebook.

The one show above is the only way to draw and edit the title of a scene. As discussed in Chapter BULK DUMP, in a different window, you can change the number of scene and then copy it into a different memory of the Yamaha, but in that case, the new allocation will retain the old title, to edit it in a new (xxxxyy2 eg.) it will return to this page (frame, square amendment entitled "Memory Scenes").

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Bulk Dump

Introduction and software specifications

The Bulk Dump is the possibility to send/receive Mixer from Yamaha and from software the content of these memories on the Yamaha.

The Yamaha stores these data types, stacked on the left in the MIDI fourth page (Yamaha manual p.232) as:

ALL: all the following memories

SETUP MEM: only memory containing settings Setup (Source, Listen, Mono/St, Solo Setup, Groups, Pair, Dither ...)

PGM TABLE: Table assignment of scene memories to data Program Change

CTL TABLE: table assignment of parameters to data Control Change

and right column, inasmuch with other options (nr, type):

SCENE MEM: scene memories from 01 to 99 (00 read-only) containing all data transmitted and received via MIDI (faders positions, assigning libraries, pan etc..)

LIBRARY: 3 separate libraries: **EQ** (equalization), **DYNA** (dynamics processors) and **EFF** (effects processors)

REMOTE: also with different types and parameters.

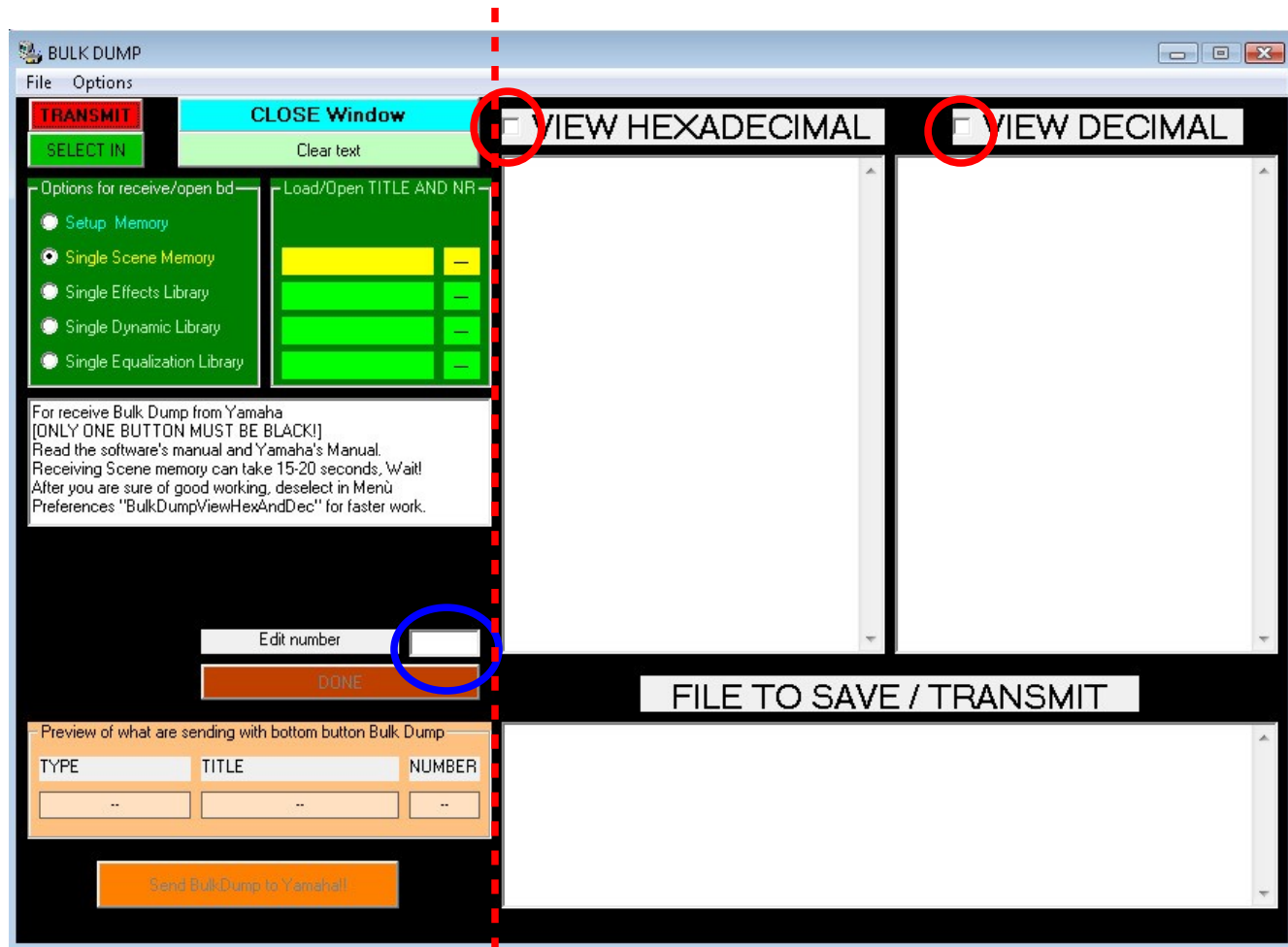
In implementing these features of the Yamaha Bulk Dump in the software we had chosen to ignore the REMOTE because personally not used, and PGM and CTL TABLE because a different allocation of PGM and CTL would prevent the proper functioning of the same software deployed until now the match by default the same MIDI data. Assign additional variables to this data, it would become more cumbersome than a program even a little effort as helpful in this case the normal statistical and non-use of these opportunities.

This does not mean that these parameters can not be implemented one day, but given the timing and other emergencies, we can say that this will be virtually impossible.

Summing up the software is currently implemented only previous **titles in bold and underlined**, MIDI data sent from other (*in italic*) are not read by the software and this do not sends them to the Yamaha.

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Initial vision and using the controls



To open the BULK DUMP window in the software click into menu **MIDI** the text **Bulk Dump** or just keyboard <CTRL>+B. Closing this window is controlled by the button **CLOSE Window**. Buttons **SELECT OUT** and **SELECT IN** are a copy and have the same function as one in the main window of the software. Are shown to have the immediate ability to switch between the two states (transmission-reception) and receive/send messages of bulk dump. The window is divided into two sections (separated in pic. by dotted line Red): the left with the options and buttons for receiving and sending data with adjacent fields date, the right which has 3 text boxes for any display of data received (above) and sent (below). ¹ The higher of these are for the data in hexadecimal and decimal. The underlying data (files to save/transmit) are in decimal because so saved the text file output, but sent in hexadecimal format using the MIDI exclusive system messages. To view the overlying one in mode reception from Yamaha you must check the related check boxes (red circled). In all this window the only editable text by user with numeric keypad is the numeric field to select the new scene or library to save and send the contents of memory, circled in blue in pic. All other texts will be made automatically by the software.

The mode of operation of this window will not cover all the features offered by Yamaha that assume the existence of a specific Hardware for Bulk Dump, maybe the same Yamaha.

¹If you do not intend to display the data stream can be easily (but manually) resize the window hiding these text fields.

If you possess similar hardware, this part of the software may not be useful, assuming the completeness of the implementations of these machines.

We see the operation and limitations of current software.

The software accepts the receipt of individual setup memories, scenes memories, effect library, dynamic library and Equalization library sent by Yamaha. This means that it is unable to recognize the sending of all (ALL) libraries, but even the sending of multiple memory of a scene or a single library (eff dyn, q) in one time.

If you accidentally press the TRANSMIT virtual button of Yamaha when more than one option is selected or when selecting an option other than software, the software displays the following message "Run-time error '5' Invalid call or argument "and will end immediately after pressing the OK button.²

The software is not able to send the request for sending Bulk Dump (REQUEST) nor to receive it to enable its submission to the Yamaha.

Similarly, the software can save and open files each containing a single memory.

Now we follow a single procedure for know how to proceed with the software on the Yamaha. Now will prepare both for the transmission of memory setup (SETUP MEM) on Yamaha:

Into software press **SELECT IN** to receive MIDI data, and select the first option "Setup memory", then select (if not selected already) check boxes for the display of incoming data "VIEW HEXADECIMAL" e "VIEW DECIMAL"

On Yamaha go, by pressing the MIDI button, at the fourth page on the Bulk Dump. Using the cursor keys and the ENTER button select the only virtual button SETUP MEM. And deselect all other. Only one button at a time will be darkened (selected). Again with the cursor keys and the ENTER key, press the TRANSMIT virtual button. The Yamaha will send MIDI data concerning current and unique statement of the setup parameters (see Yamaha Manual).

Into software MIDI data received will appear in two formats. The number boxes (Edit and below) will be disabled and show the text "(no)" because it is a memory only and can not be renumbered. Now that the data are into software and then they are stored in computer memory we have four options: save memory contents to a file on hard disk, re-send the same setup data to the Yamaha, get the contents of an other memory (thus erasing the current contents of the temporary memory of the software/PC) or open an existing file on HD. The content of the text boxes are copied but not editable.

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Saving files of Bulk Dump

The first chance:

To save the contents of the temporary memory of the PC on a file, containing data setup as this case, we press in the menu **FILE** the text **SaveAs** (in this version will be always disabled direct saving "Save"). Appear the window that opens the prepared folder to save the Setup memory file (.../(program dir/setups/) and here we can choose the filename to save, default "SetupMemory.txt". It is useful rename for various settings and not to delete the previous setupMemory data. If the filename already exists, a message warns us and

² The problem is that the length of the transmitted data varies for each type and the software can not know in advance whether the incoming data correspond to its expectations, selected through the options, which control both the transmission than receipt, than the opening and saving files on HD.

overwrites the existing file by pressing YES, the procedure of saving ends instead if you press NO, in this case you should press again the text "Save As" from the File menu.

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Sending MIDI data to Yamaha

The second chance, after receiving MIDI data from Yamaha containing the parameters of its SETUP, is to return them intact to the Yamaha itself. Unnecessary operation which involves replacing the original data with its exact copy. We use it just because of his harmless for understanding the operation of transmission data by software.

The first thing to do on software is to prepare it for sending MIDI data, so you must press the button **SELECT OUT**. Will appear **TRANSMIT**

Pressing the virtual button **DONE** on software, the memory is replicated in the right window, which represents the contents of the data that are being saved to a file or sent to Yamaha. Better to take note that this button is disabled until you have received MIDI data, or opened a file from HD. After pressing, turns again disabled and instead enables the button below **Send Bulk Dump to Yamaha!** In the same time the frame of orange field "Preview of what are sending with bottom button Bulk Dump" display type (in this case "Setup Memory"), the Title (in this case "not needed") and the number (in this case does not present) of data that are being sent to Yamaha. Only the pressure of last button **Send Bulk Dump to Yamaha!**, actually send data to the Yamaha will use them to replace those that are in its memory, **without any prior or subsequent to confirm overwriting.**

Unlike what was seen in the first footnote on the page, where software responds closing to a submission incongruous, Yamaha is able to recognize that fairness and in case of sending incorrect data, will only know by flashing with no clear void or jeopardize anything. The only risks involved in using this part of the software are to override individual scenes or individual libraries for your "voluntary" oversight, just like those that run when you save any file on your computer by overwriting a good file with a full errors or incomplete.

Pressing the button will sends MIDI data to Yamaha without any confirmation appears neither software nor on the same Yamaha. Your data will overwrite existing ones, and on software the same button will be disabled.

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Reception MIDI data from Yamaha

The third possibility, after receiving data of Setup Mem from Yamaha, is to receive other types. In this case we are aware that the previous data received will be deleted from the temporary memory of the software and replaced with new ones arrive. For example, we receive data of first **Memory scene** stored on a Yamaha number 1.

On software, we develop MIDI reception pressing **SELECT IN (RECEIVE)**, choose option **"Single Scene memory"** Remember that it is crucial to choosing the reception / transmission/opening/saving files, as this is the only one that determines the amount of data, the memory size. Also press the Clear button to clear the text (if any) of the three text windows, let this once again selected or reselect, check boxes display HEX and DEC and we move on Yamaha.

On Yamaha, select with the arrow keys and ENTER button the virtual button **SCENE MEM**, Then go back on SETUP MEM, again ENTER to unselect, then we move to their right to determine how many and which scenes we want to send to the software. Because we can send one at a time, and we decided to send only the first, using the cursor keys and the wheel **PARAMETER** select in both fields (FROM and TO) the number "1". Control that only **SCENE MEM** is selected, move the cursor on **TRANSMIT** and press **ENTER**.

On software, scroll bars for text boxes above begin to shrink, **after fifteen seconds (wait with confidence!)** appear finally 2056*2 (HEX and DEC) data concerning the contents of only first Yamaha's scene. The long wait is due only to formatting text, but is useful for the first time expect to realize this textual output of receipt of MIDI data coming from Yamaha. Through these scrollbars check that the first and last data are always "F0" (DEC 240) [Init Sys Exclusive] and "F7" (DEC 247) End Of Exclusive.

Once established and understood the operation of the window BulkDump for all operations of bulk dump data reception or open files, or better, for the only operations on the memory Scenes (the longest in terms of bytes / data) can be easily do without the data on display, with remarkable savings in time. This will be sufficient or uncheck the boxes for manually or set deselection by deselecting of "BulkDumpViewHexAndDec" in the menu **Preferences** the main window of software, accessible even with that of BulkDump. This save in file **pref.00v** lthe settings to be loaded with every subsequent startup of the software.

Also on the software, in the yellow box beside the option Scene Memory, appear the title of resident memory on the Yamaha and its scene number. These data, title and number, are derived from MIDI data sent from Yamaha, and are also replicated in the boxes below the frame number and Edit "Prewiev ...". At this point we can save the file as is (with the same title and number of Scene), simply repeat the previous operation with menu "Save File As". A new saving-window appears, in the directory of the memory scenes this time, with the file name formatted as ("scene number" + "SceneTitle"). If you want to change the scene number to be able to copy to a different memory than the current Yamaha and / or save HD already a number of different scenes and then different title for the original part number, we can edit the number only in the appropriate box "Edit Number" and press "DONE".

It is important to clarify that: the number of scene that his title is part of the 2056 data sent / received via MIDI; that the function of "Done" button is just to rewrite the 16th number of the list related at the scene number and the penultimate, the checksum [sum of all data, reversed sign of the two's complement ...]. This clarification is due to the fact that it is obviously possible to save a disk file and rename it as you like maybe with a different number, but this change of name and number is useless if made in the save dialog, as in the file the number or the title will suffer, and once opened for reading this file, comparing the original number and originale names contained in the file.

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Opening files of Bulk Dump

The fourth possibility, is to open a saved file on HD.

To do that click on "**Open**" in "**File**" menu of this window Bulk Dump.

Again, the option that is selected among the 5 available (Setup, Scene, Eff, Dyn, Eq) decide the type of file to open and click on the related directory. The contents of the temporary memory of the software is replaced by the contents of the file. The title and number depend on the content of the file and not on the file name saved. Once loaded, with or without display in text boxes above, may be re-numbered and sent to the Yamaha or saved with the

new number set in the "Edit Number".

No confirmation of overwrite memory on the Yamaha, and the usual request for overwriting when saving with the same number and name.

Recapitulating is preferable, before renaming or renumbering scenes of memory, or the individual libraries, to make a full backup by saving the number and title also present on the HD Yamaha [by sending from Yamaha scene to scene library to library, deleting the text with "cleartext" whenever and Save As already suggested] then, when the need arises, reopen one of these scenes from files, renumber it at will, re-save a copy in HD and send it on Yamaha's new memories.

For libraries on the Yamaha types can be recalled through the roller parameter (DYN, EFF, EQ) once went with the cursor on the related line for [library].

Care in selecting on Yamaha fields FROM and TO always with the same number, to send to software the contents of a single memory for once. Conversely, the Yamaha will always be able to recognize the type of data received from the software and immediately replace them in memories.

To rename Scenes titles, since it is already present in the main window (with a simpler procedure due to the use of CTRL CHANGE Message), it was not necessary to repeat such a possibility in this window BulkDump.

A typical mistake is to forget to select the MIDI output when sending data from software and back the MIDI input to receive them. The software does not indicate in any way fail to submit or failure to receive data in these cases.

Another tip is to make a full copy of the folders "scenes" "setups" and "lib" directory to another dir after being filled with backup data on the Yamaha, so you can always have available the manually made data before the use of the software.

Text boxes containing the titles and numbers of the scenes and libraries will remain visible even when you work with other types until their replacement done automatically on opening a file or receive MIDI data from Yamaha. That's the important reason to always look orange frame at the bottom to know what you are sending or saving.

For additional enhancements and bug fixes expect any suggestions and comments.

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Channels strips

HOME and OPTION I/O

Channels are implemented and appear very similar to the Yamaha, the channels 17-24 of the optional card using the same channel strips than normal 1-8.

Currently it is not yet implemented the possibility to exchange the channels with the press of virtual button GLOBAL "SWAP" in the fifth page of Option I/O Yamaha. This does not mean that we can not use the memory scenes so septate, because the software works properly with all available commands, the only difference is that the software does not indicate any Swap Mode.



To switch between channels 1-16 to optional ones 17-24 press, in transmit mode, the button **Option I/O** it remark its activity becoming **Option I/O** and pointing with **yellow text on black background** channels labels **17-24** on bottom of the window. To return to manage the channels 1-16 you press the button **HOME** that things will reverse again. They are, as the Yamaha of course alternative, and I repeat, being impossible receive the corresponding messages of the Yamaha is

better to use only on the software. *Their pressure lead to the illumination of the buttons on charges Yamaha and their effective function.*

Their function is identical to the real of Yamaha, by repeatedly pressing it behave the same way, changing the relevant page from first to fifth. There is therefore no need to use more physical counterparts.

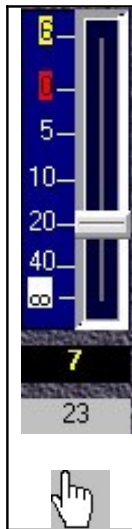
If you are in the reception mode and you are working directly on the Yamaha, to switch between channels 1-16 to the optional ones is therefore necessary, instead press the OPTION I/O Yamaha press **Select Out** and **OPTION I/O** on software (back at the moment in **Transmit mode**) and then return in **Receive** mode with its button.

However even if you press the Option button on the Yamaha and change the positions of controls on the channels 17-24, the software receives them and stores them correctly, and shows it soon as you press the button **OPTION I/O**.

In general, I repeat, when you press these buttons on Yamaha, the software can not respond and this can mean for example turning off both ways HOME (ch1-16) and OPTION (CH17-24) in the software resulting in inability to act virtually the faders up the pressure on software either button (Home o Option).

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Channels faders and Master fader



The channel fader has a label at the bottom that turns color under current mode **HOME** (ch 1-16) or **OPTION I/O** (17-24). *in Fig. alongside the fader controls the channel 7.* It supports various modes of change and that can be operated by dragging the cursor with the mouse, click within its lane, using the keys <Pag Up> and <Pag Down> of keyboard (discrete increase), arrow keys (↑ and → increase of one the value, ← and ↓ decrement of one it) , using keyi <Home (↵)>*** and <End> you bring the fader respectively maximum and minimum position. **Is normal some noise of faders of Yamaha .**

Moving the mouse over the labels **0***** and ∞ see a white little hand with a simple click allows to bring the fader on the respective position (0dB and -inf)

*** Click on **0** or using the key <Home> the Yamaha immediately move the fader and, most importantly, raise the output level of the channel to 0 dB (no attenuation of the input signal) or even to +6 dB!!!.

This can be harmful to your ears and monitors any active with high levels of amplification!

Later you will learn the original features of "Menu Utility" including the lowering of all faders.

The **STEREO MASTER** fader has the same characteristics of channel faders except the **0** that it was considered prudent not to implement.

Keep in mind that on the Yamaha this fader is used in many ways (Channel Master, Aux Master, Master Effect etc..) of these features otherwise implemented in software will be speak later.

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Buttons SEL – SOLO – ON/OFF (Mutes)



Above each channel fader are three buttons SEL-SOLO-ON/OFF, that is a faithful copy of those of Yamaha for their function. Buttons **SOLO**, **SOLO**, **ON** and **OFF** are switch on/off type, their repeated pressure switches that function. On the contrary the button **SEL**, **SEL** is *RadioButton* type that mean that you can deselect one button only selecting another button. It is also activated when you press one of two other buttons on the same channel and when touched on the Pan or labels.

About using mutes **ON** and **OFF** it are the same of Yamaha. In mode **OPTION I/O** channels 9-16 are disabled.

Using <Tab> followed by <Spacebar> or <Enter> you can move in sequence in the channels using only the keyboard.

Buttons **SEL** **SEL** of software send their state to Yamaha, but this do not do the same (no MIDI message). But it isn't a problem.

Wanting to follow in as much as possible the real mixer we have kept this function, which is essential to activate the window of Equalization.

The Yamaha buttons “**SOLO**” unlike than mutes “**ON**”, do not send to software a univocal MIDI message about the state on/off but only pressure state, This means that if you turn on the software and then on Yamaha without be passed into reception mode, their functionality is reversed because its type is undifferentiated on / off switch.(As with the switches of the lights when there is a diverter).

Later you will learn the original functionality of “Menu Utility” including the switching on and off of all channels.

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PANNING

The management of panning in the Yamaha is entrusted to a single control body in white found on the right of the display. This involves the awkward pre-selection of each channel to change the Pan. The view of the changes made is entrusted to the small display in different ways. After many years operating this dial numb and fail changes.



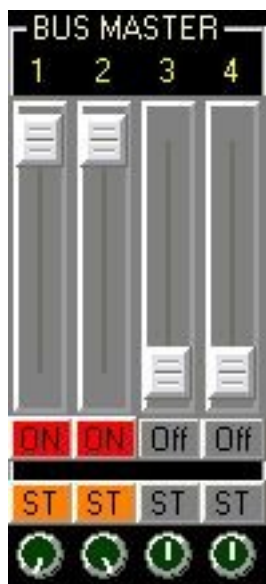
Utility software to manage a Digital Mixer revealed in similar situations. We have chosen to put all the commands of panning in the main window, so they are always under control, even when obviously work on the Yamaha.

Again it was done to include useful features such as sensitive labels (the appearance of the same white hand above) that move the pan immediately in the three positions most used **L** (Left), **C** (Center) and **R** (Right).

Similar to the Pan faders on display also agree to be controlled via keyboard arrow keys etc..

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BUS MASTER PAN



An exception to what said before is that the 4 pan of Bus Master in the Yamaha can be controlled through the wheel "Parameter" in the page. 3 of Pan / Routing ", in software rather have 4 separate rotary controls in its routing switches to the Stereo Bus (**ST**ST).

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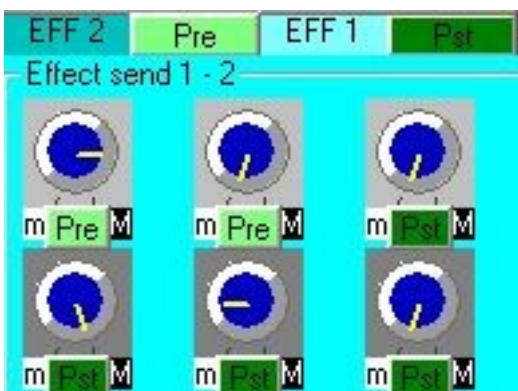
The effects

Effect Send 1-2

The Yamaha 01v Mixer provides 2 stereo multi-effects processors, each with 42 presets. The entire library of 99 effects, of which 42 presets and 57 user-definable, is unique but can be variously used in the two processors. The effects user, once stored are available in both "banks" Effects 1 and 2. I emphasized this arrangement because the software will edit parameters and names of effects loaded only on the first bank, knowing that these will be the same of the second, unlike the Yamaha which gives the illusion of being able to edit the effect in the second bank individually.

The effects can be applied on 24 channels and effects returns.

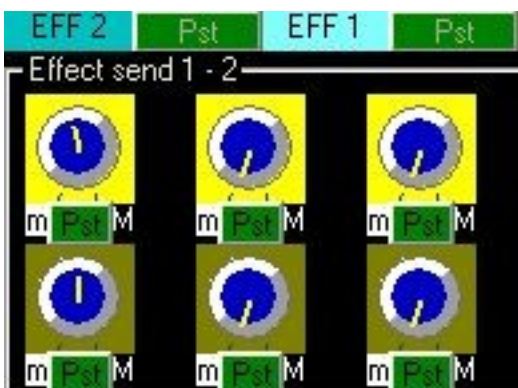
In software, with the current version, you can send the command of all 24 channels (16 nr + 8 Option), has been implemented also the choice Pre or Post fader. Also you can now choose the effect to use, edit the first 4 presets (reverb type), save them permanently or temporarily in new libraries, with numbers and titles.



A key difference between the Yamaha and software, which can cause some embarrassment at first, is the display of controls. On Yamaha the effects sends use the same 15 channel faders, by pressing the button "Effect1" and 2. In software however they are represented by two tiers of 14 new commands rotating blue, on the center of the main window, above those for panning with background light grey effect 1 and in dark grey the second (pic on left). The box that contains them becomes blue when you press any buttons **Effect1 - 2**. They are nonexistent in the Yamaha. It is preferred to have the ability to "split" these commands

to control them simultaneously.

Their function is always active in transmit mode, any button is active (HOME, OPTION I/O, AUX1 etc.), even if not seen to move its faders on the Yamaha. This means that you can vary the amount of signal sent to each of the two effects without first press **Effect1 - 2**. Or you can press "Effect1" -2 on Yamaha and note the changes made in the software. Pressing button **Effect1** or 2 "light" their stripe, the recall show faders position and possible advancement in



the pages Effect of Yamaha.

To distinguish the effects sends of channels 1-16 from 17-24, they have yellow-gold and pale yellow (left). Note that in this case (Option) buttons **Pst** of self-routing of effects are disabled, because non-existent in the Yamaha.



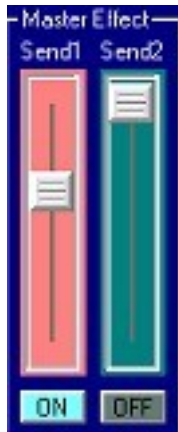
The labels **m** and **M** do reach the minimum and maximum positions of the controls.

Buttons **Pre** and **Pst** are the same of third page of the Yamaha display "Effect 1" and 2

then you can choose whether the effects of the channel is sent regardless of the output volume setting of the channel fader or not. They are usefully placed close to the effects sends.



The ability to send the first effect to the second and vice versa, this in the same effects third page of Yamaha, software is located immediately above the strip effects sends (as shown at right).



To note that the software fader Master Effect is not managed by **Stereo Master** fader as on Yamaha, but has a dedicated faders, or rather two, one for each effects processor. It is on the right of the EQ window. As depicted on left to pressing the button **Effect1** (indicates their active status becoming **Effect1**) this fader changes its color to pink, to remember its replacement function of fader "StereoMaster". Again both faders are always active in transmit mode. Even the underlying on / off button replace the stereo master mutes of Yamaha.

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Return Effect 1-2



The return effects on the Yamaha is managed in the box called "**1 RETURN 2**" through two knobs and six buttons.

In our software the analogue box **RETURN EFFECT 1-2** (on left) is on the top right of the main window and contains the 4 knobs and the usual sensitive labels for panning.

MIDI messages sent from two knobs Yamaha are different (CC and Ex) and depend on how the internal display as well as the button pressed and the one selected. (pages 32_35 of Yamaha manual: fader Mode)

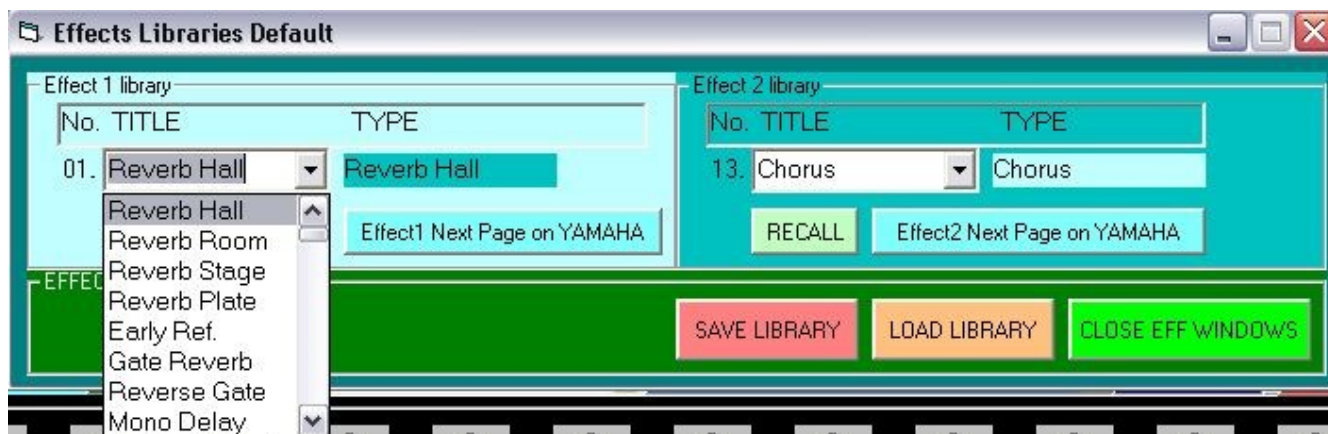
The software (in receive mode) always react correctly in the presence of MIDI messages related. Only on Fader Mode "AUX1-4 "and "Effect 1-2" (pag.35 Yamaha manual) are not yet recognized by the software send levels from Return to Aux and from Return1 to Effect2 and vice versa.

In transmit mode, as in the management of panning, as above for all the buttons and rotary controls.

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The effects libraries

Since version 3.3 is available the choice of effects to be applied to two banks and other functions. To access the window must be clicking the **menu effects** and **Effects Window** or with the shortcut keyboard <CTRL+E>, but only if is selected mode **Transmit**. Appear the following window.



The “page 2” of programs effects in Yamaha, with the choice among effects to load (RECALL) and STORE and edit his title, is like this window. Of “page 3”, with options Pre and Post Fader we spoken. Of “page 1”, where you can edit the parameters we will speak later.

Opening this window you visualize two effects loaded by default by Yamaha, “Reverb Hall” (01) and “Chorus” (13). Scrolling down the two windows as in picture above you can select others. After selected, as in Yamaha, you must recall it pressing button RECALL.

Pressing **RECALL**, the button **STORE** is enabled to store the effect. If you try to store the effect recalled, appear advice “read only”: In fact you can not change the first 42 memory effects nor their name. To do so, in a new user memory (43-99) you must follow these steps:

Software is not yet able to recognize the effects on Yamaha invoked directly by his controls, nor to receive any information about any user memories already full. Avoid inadvertently overwrite user memory already used by you!

We follow the example of a simple copy of an effect with its parameters and its name in a user memory of the Yamaha using this software.

1. Select the effect in the scroll-down window
2. Press **RECALL**
3. Select a blank memory from the same scroll-down [- - -]
4. Press **STORE**. Appear the button **TITLE EDIT**
5. Press **TITLE EDIT**. Appear the window where change the name and button **OK**. In this case we decided not to change its name, which also appears regularly in that box
6. Press **OK**.

In so doing we have simultaneously recalled (if the Yamaha was turned on and connected to the MIDI cables and correctly set), the effect memory and store same effect on memory user selected, deleting previous content (if there was) and setting name.

If you cannot still receive information from Yamaha about the content of user libraries and their parameters, it is possible to edit their names, do not overwrite their parameters. **But this, only in other types of effects instead reverb.**

As we will see, has implemented the ability to edit all parameters of the first four effects,

namely : Reverb Hall , Reverb Room , Reverb Plate and Reverb Stage. In reality this is a unique reverb algorithm with 14 parameters differently setted.

The Edit button we will talk later. Now add that the window is divided into three sections:

- The left has the assignment / recall of the effect selected in first processor and the two buttons, first for Edit to change the parameters and the other simply to advance the page in Yamaha
- That right, similar to the left minus the Edit button. In fact, as previously explained, the effects libraries is to be considered single
- The third section below should be considered common and contains common commands storage and editing of the title. In addition, without an equivalent in Yamaha, three new buttons:
 1. **SAVE LIBRARY** save on Hard Disk actual library, made by the possible new user presets and parameters added, edited or not, in a file in subfolder **\libraries** with extension ***.fxv**
 2. **LOAD LIBRARY** loads the contents of files stored on HD in \libraries and makes them available for use
 3. **CLOSE EFF WINDOWS** simply closes the window effects and, if open, the editing one.

For saving and opening files, currently you can only edit and recall memories of the first four type, you can edit, and save files temporarily* parameters and the names of 57 different types of reverberations.

* "Temporarily" refers to software that is pressing the OK button on the software is not written yet no file on the HD but is stored the corresponding operation on the Yamaha!

The EDIT button is available only after invoking the selected effect and if available. Pressing RECALL close any editing window to be able to reopen the new effect loaded. The opening of the next window will be joined at the bottom of the previous, while movable and minimized as most of it in the software. Operations level effect send, receive level, panning etc will continue to be made in the main window that will be always present.

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Effect editing window

If the recalled memory is existing, EDIT button becomes available only in the first section on the left. Currently you can not edit the effect parameters 5-42 but only the first four and all effects that were saved to a file. A sad message remember it to us.



The window that appears when you press the button **EDIT**, somewhat reminiscent of the display of the Yamaha, but it condenses the parameters in a single screen (instead of the two or three in the Mixer). Parameters can be edited easily through the thin sliders (In the usual way of the software). In real-time MIDI messages change the settings of the Yamaha.

It should be noted that in some cases have not been able to understand the scaling of the parameters adopted by Yamaha, absolutely arbitrary and undocumented, resulting in some minor differences with the Yamaha in the numeric display by the software. But what matters is that the values of Yamaha are the original ones.

Upon reopening/recall of an effect stored in a user memory, will reappear the editing window, with the related title. The Effect Types of 01v are the same of effects, 42, then the user memory presets have associated the original effect-type effect than the edited one.

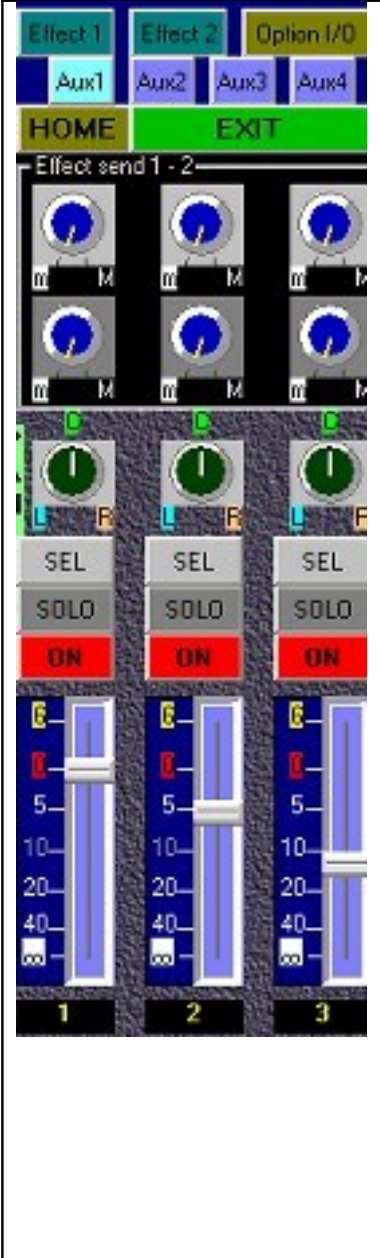
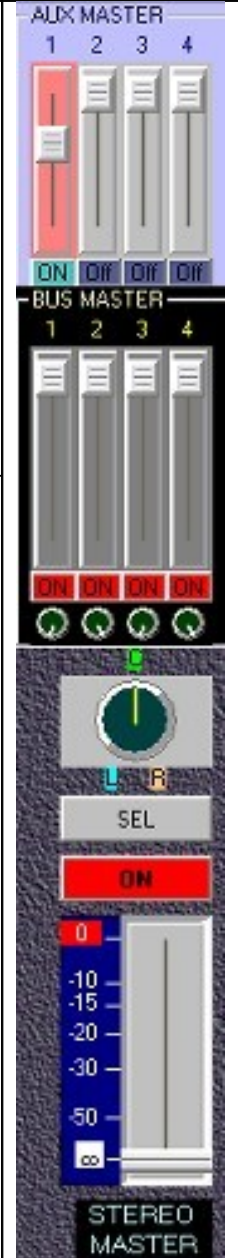
Some choices of Yamaha seem absolutely ridiculous and grotesque, such as to allow variation of the order of a millionth of a second (0.001 ms!!!!) besides completely virtual, imperceptible by the ear and annoying to set spinning like a madman the Wheel Parameter. I'm certain that very few of you have so far had the patience to manually edit the effect parameters, to change the names etc.. Even this feature of this software, it pays to the modest expenditure.

For all that concerns the meaning audio editing effects, see the manual of the Yamaha acoustic and technical literature.

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The Auxiliary channels (Aux1-4 and Masters)

AUX 1-4 e Aux Master

	<p>In mode TRANSMIT pressing one of four buttons Aux1 (1 – 4), that become Aux1 (left), channel fader change colour pointing out the different function activated, like the Yamaha.</p> <p>The only difference with Yamaha is that the again the STEREO MASTER is disabled (light grey in pic on bottom right) is replaced by a dedicated fader AUX MASTER (from grey to pink) top right. The button (ON Off - mute) replace the same on STEREO MASTER to activate or not the Aux master, while is always enabled in Master Fader the function Mute of Stereo Out (ON/Off). The AUX MASTER fader is always active in mode TRANSMIT!!! Each time you press the button corresponding Aux progress page on the Yamaha.</p> <p>Currently you can only control channel sends 1-16 to Aux 1-4, in mode TRANSMIT and RECEIVE but not options Pre or Post Fader.</p>	
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The Busses (Bus 1-4 and Masters)

BUS MASTER 1-4



The adjustment of the levels of the 4 Bus is done through four faders dedicated (to the right of the main window) with its four rotary controls for panning, as described above.

These Bus commands are always active in mode **TRANSMIT**. Their function is visible on the third page of "Pan / Routing" of Yamaha.

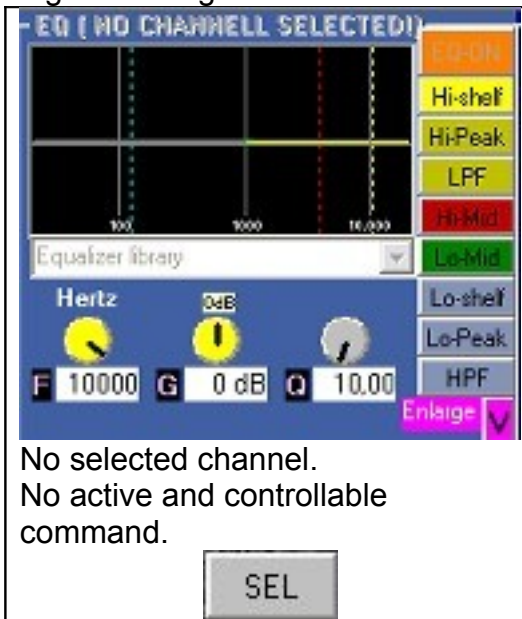
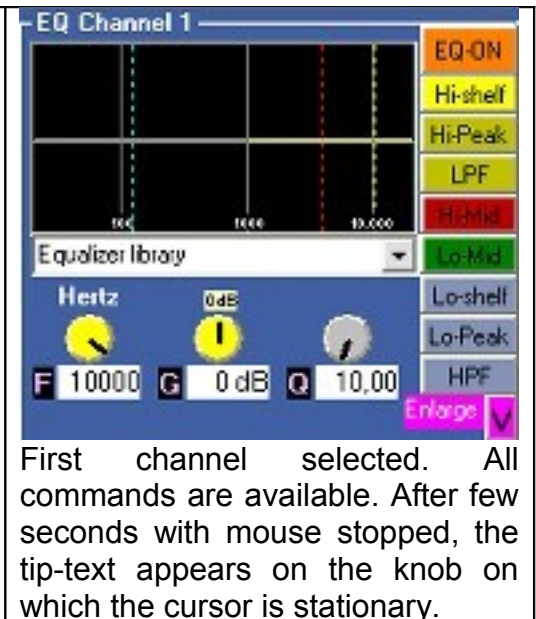
Since version 3.3 has been implemented the possibility of their routing to Stereo Out (TO ST) with 4 buttons **ST**.

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The Equalization

Activation

The parametric equalization in the Yamaha has been largely implemented through an extensible window always visible in the main window. We could implement a series of knobs splitted for channel strips as in other software, but it was thought that the mere display of rotary controls to a specific location / value does not help much for the immediate understanding of the type of EQ acting on that channel. It is therefore preferred to keep the logic of the Yamaha for which you must select the desired channel to display and to change digital filtering.

 <p>No selected channel. No active and controllable command.</p>	<p>On the left is represented the view of the window when it is not yet active. [EQ (NO CHANNEL SELECTED)] To activate it, it must first select a channel (button SEL) so that it becomes as shown on the right.</p> <p style="text-align: center;">SEL</p>	 <p>First channel selected. All commands are available. After few seconds with mouse stopped, the tip-text appears on the knob on which the cursor is stationary.</p>
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Description of the window

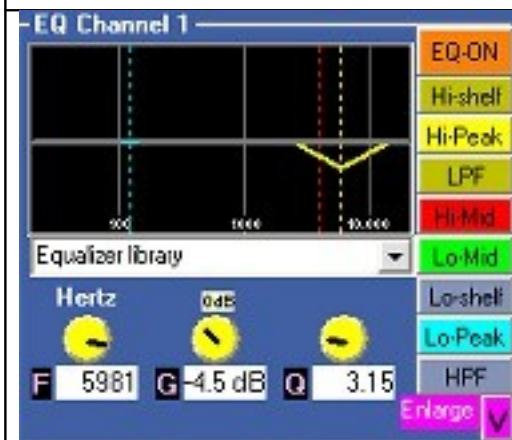
On the left is the display window of the changes made, it is similar to that of Yamaha by presenting the same vertical grid with references to 100-1000-10000 Hz. On the right are buttons that identify and trace the 4 buttons on the Yamaha ("High", "Hi-Mid", "Lo-Mid", "Low"), in fact the "High" button of the Yamaha has been replaced by a different name **Hi-Peak** as "LOW" by **Lo-Peak**, this is because the functions "Hi-shelf" and "LPF", accessible on the Yamaha moving the large rotary control after selecting the "Q" (Quality factor) at the ends of its range, have been implemented in software with dedicated buttons, precisely **Hi-shelf** and **LPF**. Similarly you will not find a button "LOW" because replaced by three buttons **Lo-Peak** **Lo-Shelf** and **HPF**. The top button **EQ-ON** switch on/off equalization of the selected channel. The buttons are already in part described below are organized with different colors for the concerned frequencial bands. The same colors Yellow, Red, Green, Blue will identify the knobs at the bottom of the window.

These last three **F** (Cutoff frequency / center band frequency) **G**(Gain) **Q** (Quality factor - camber). Depending on the type of band / button activated the knobs of frequency and of Q and of sensitive labels can be activable or not.

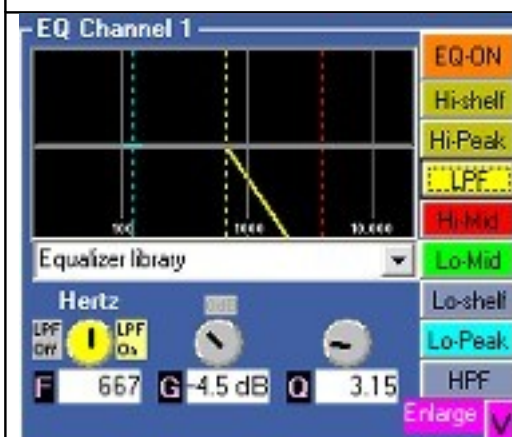
Using the EQ panel



Pressing button **HI-SHELF** (default selected) you have access to the parameters of the rotary controls **F** and **G**, the **Q** is disabled (in grey) being the type of filter selected is not compatible with this parameter. The Gain label **0dB** is sensitive (as the previous pan L-C-R) and shows the command immediately at 0 deciBel. Turning the knob **F** you can change the cutoff frequency of filter (5646Hz in this eg.) and that **G** the gain (6.5dB). The display is still kind of in line segments, but it matches enough the intervention.



Pressing **Hi-Peak** you active the BandPass / BandReject filter with center frequency set in **F** (5981Hz), the **G**ain (-4.5 dB) and also in this case his **Q** (3.15). All values and the range possible are those of Yamaha, of course.



The LowPassFilter is activable pressing **LPF**. The cutoff frequency is always controlled by **F** while other two knobs are disabled being in this case unnecessary. So also label **0dB** Appears instead of two labels sensitive respectively named **LPF Off** and **LPF On**. They replace the "On / Off" option on the Yamaha in the box of gain when you select a Q = LPF.



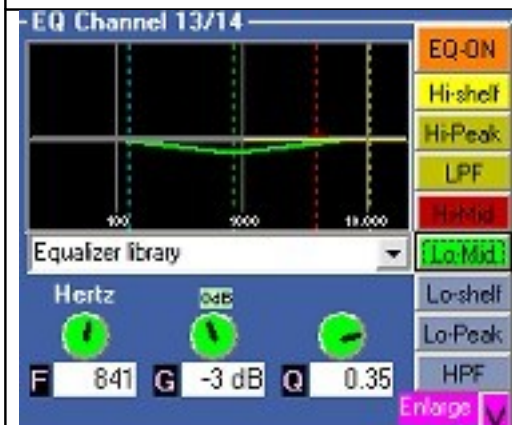
Clicking LPF Off this label flash (**LPF Off** switch off **LPF On** in LPF On) and LowPass filter is disabled.

The segment related disappears from the display window.



The second of the four parametric filters available in the Yamaha is called Hi-mid and is activable in software (with its activation of the control of Yamaha) by pressing the button **Hi-Mid**. It has available all three controls **F**, **G** and **Q**, also the label **0dB** of the Gain.

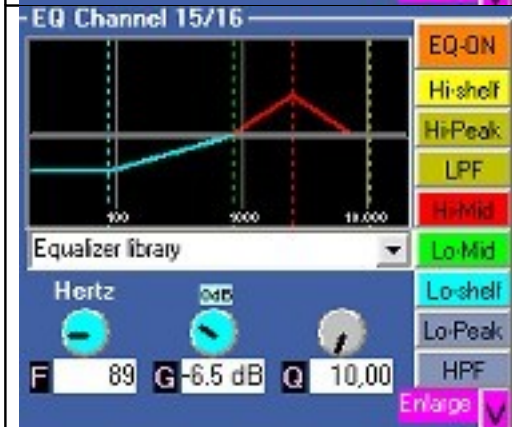
Where the other three filters have gains other than 0, they will be visible in the display window with the corresponding segments of the same color.



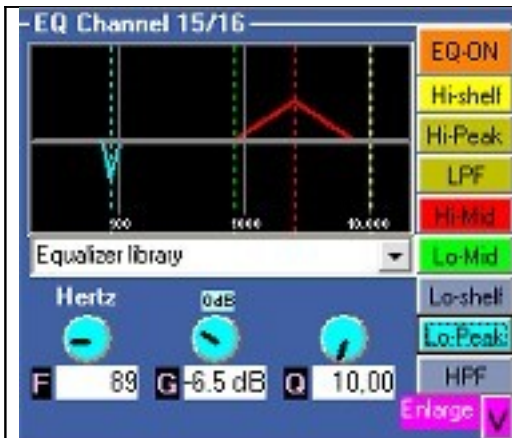
The button **Lo-Mid** enables operation of the related BandPass filter, with the use of controls and labels similar to the previous **Hi-Mid**.

As you may have noticed each of the four colors yellow, red, green and blue marks all the controls and labels on one of the four filters available for immediate identification.

Each time you press one of the 8 buttons (except **EQ-ON**) change knob's colors.



On left image the button/filter **Lo-shelf** is active but at the same time you can see the curve of the filter **Hi-Mid**. Because the knobs colour now are blu, in this moment you can edit with they only Frequency and Gain of **Lo-Shelf** filter, but the Hi-Mid filter is active too. To edit this press **Hi-Mid**, red knob with actual values setted and visible for that filter show itself and tell their availability to be edit.



Compared to the previous situation was just pressed the button **Lo-Peak**, remaining unchanged the cutoff frequency (89Hz) and the Gain (-6.5dB).

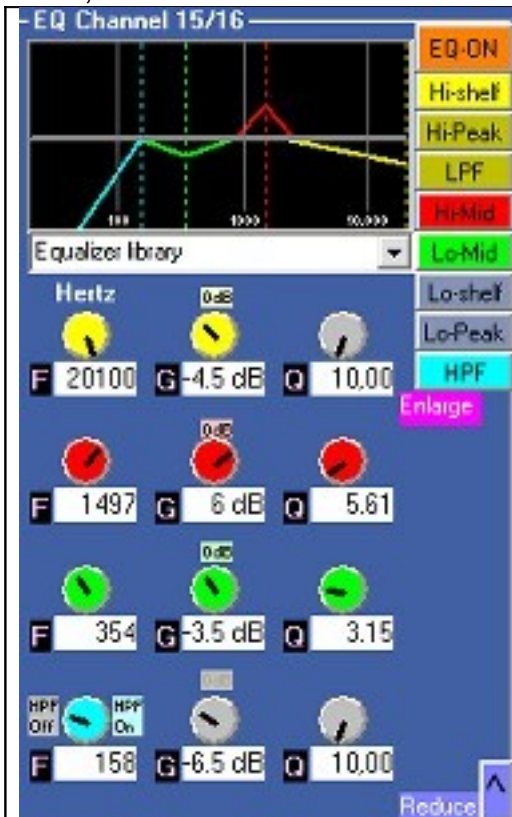
The active **Q** now is by default to maximum (10.00) that tell a curve very close that is a very small band around the center frequency of the filter.



In addition at HighPassFilter (**HPF**) of group *Low(band)*, also other 3 filters are active as visualized in the window. About using of all knobs, we remember, it is still valid (as other software) the fine setting of command clicking and holding pressed mouse button, go far from the figure.

The greater the distance the smaller will be the difference in values changed, but not less than the minimum rate that varies according to the command.

If you plan to use a single filter for a particular channel, as illustrated this told is the preferable view, because it does not invade the camp of the other commands of the virtual mixer.



For use all 4 filters you can use also an extese view of equalization processor.

To extend the window as on picture on left, click on "V" bottom right of the window, next to its label **Enlarge** to appear the window on left that show the same equalization of the previous frame.

In this manner you can view and set all parameters for the 4 filters also note visually the effect.

The knobs are all active and not need to be activated by 8 buttons to right up. To return to compact and variable for type of filter, simply press the button **"V"** inverted on bottom, near label **Reduce**.

Keep in mind that these are four independent filters with the same range 20~20khz for all, then, beyond the assigned name from Yamaha (Hi, Hi-Mid, Mid, LowMid, Low) their frequency and relative bandwidth of action is absolutely free and combined.

Note that the software is in continuous evolution and enormous final complexity, is not currently able to view the curves that best match the performance of the filtering and especially not in a position to calculate the graphic result due to partial overlap of the various filters. This does not mean it does not work already fully informing the Yamaha the timely and accurate information of the parameters. The Yamaha will correctly display the curves and the interactions of the above in addition to just display the values set by the software. It will be good make adjustments via software until the end and then take a look at the Yamaha display to avoid surprises due to a lack of "intuition" of the resulting curves. Moreover any work on a mixer is to be evaluated primarily (though not exclusively) always just by listening!

Let us finally remember that a good EQ preferably uses only small negative gains (deemphasis) and that sudden large gains by the extreme sensitivity of the rotary controls data, can create peaks due to the oscillation of the digital filters when the relative frequencies are excited by input signals.

In this version we complete the save of changes to each channel, this means that selecting different channels are displayed on the current parameters and their respective curves. The equalization of each channel are now saved in the patch file but still without a new name for the user presets. Instead will be reopened parameters and the names of the libraries existing (original) when loaded on each channel.

So to create custom EQ for each channel, do not leave the loading of presets, and modify the parameters, otherwise these changes will be lost at each selecting a different channel [the software reading an existing preset recall it with the existing factory settings]. Instead, you must select the channel, do not open the drop-down presets window, and manually change all the parameters needed. When the settings are satisfactory save the patch. At its reopening will be available all the parameters of EQ for each channel, those using presets with their Title and those created on the "Init Default 0dB" with this Title and the parameters chosen and saved.

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The Equalization libraries



Currently, the software enables retrieval, visualization and editing of only 40 original presets of the Yamaha over the "Init Default Gain 0dB". It 'just click on the little black arrow to the right of the scrolling text box located below the display window to access it. After the first selected Preset is also possible to scroll all of the other pressing the arrow keys (up and down) on the keyboard. For each selection is immediately recalled all the parameters in the software that is on the Yamaha.



On the left we see as an example the use of preset "**E.G. Dist 2**" of the library of the Yamaha. As stated above these parameters are active only on the selected channel and can be changed freely, but not saved in a new preset with a new name. If you modify existing preset, the settings will be replaced from the original, even changing the channel!


As is also evident from a comparison between the software's display and that of the Yamaha of this presets are still not made the necessary calculations to create a single EQ curve, but they are separate and segmented lines of the 4 filters. What that it still has its usefulness in the easy identification of which parameter to change following, as is always true without fail and needed, just about listening rather than on the graphics too accurate of a display. The parameters of EQ for each channel, both existing presets that those will be created starting from the default 0dB, will be reopened with the opening of the patch file relative to the existing name of the original library, were modified by the generic "Init Default 0dB gain" or without a title.

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Visualization of MIDI data input

Channels messages

The software can check for incoming MIDI messages via two separate panes positioned in the top left: one for channel messages (Parameter Change, Program Change and Control Change) and that for the system exclusive messages (Ex). Of course the software must be in receive mode **RECEIVE**. (Pressing **SELECT IN**)

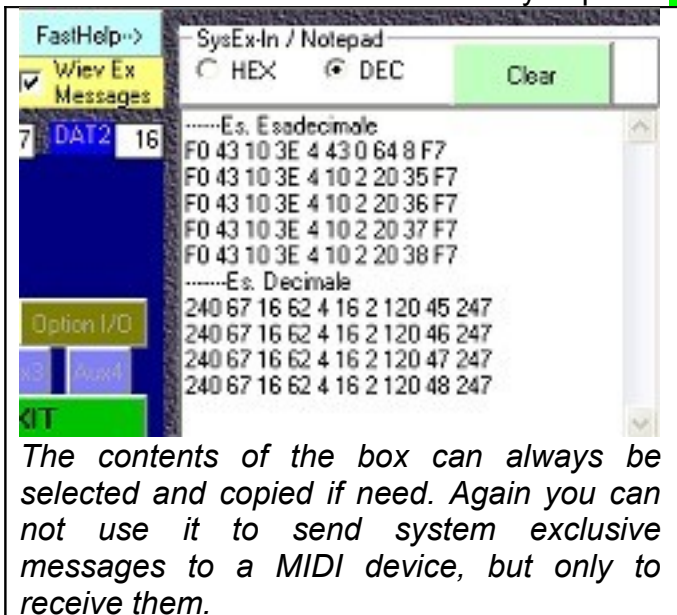
	<p>In the left pane we see the first type of message is divided into MSG which is given by the type of message channel (175=control change)+ MIDI transmit channel (1). The "176" indicates in this case, the channel fader.</p> <p>DAT1 is DATA1 of the message, in this case related to channel 1 of the mixer.</p> <p>DAT2 is DATA2 the parameter received, 29 = position 29 of channel Fader 1 (values 0-127).</p> <p>These data are not editable, and then can be sent to the mixer or other device, but only received from any MIDI device connected to the MIDI-IN.</p>
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System Exclusive messages

In the box in the upper left corner of the software, called "SysExIn / Notepad" we find a text box with three features:

1. Fast help (immediate help for first operations)
2. Notepad (a notebook for notes on the current patch of the mixer)
3. System Exclusive messages (The window we are dealing with in this chapter.)

This feature is turned on whenever you press **SELECT IN**

	<p>The checkbox titled "View Ex messages" is by default active and serves to switch between viewing of exclusive messages and that notepad, deleting every click (tick) the content of the text box to his right. The text box has a top bar that contains two options for choosing the display of messages in hex / decimal format and a button to clear it. In the example have been placed manually the words "----Es. esadecimale" etc. Also note that in this instance there is no relationship between the decimal and hexadecimal numbers except that they are 10 numbers whose significance goes beyond this discussion.</p>
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The contents of the box can always be selected and copied if need. Again you can not use it to send system exclusive messages to a MIDI device, but only to receive them.

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Signals Routing

The Routing window can be viewed by selecting **Routing Window** in Menù **Routing**. It is active only in mode **TRANSMIT**.



The controls are quite intuitive and need no explanation being a series of buttons of the type **On** / **Off**. Each time you press the button is immediately forwarded the message to Yamaha, which may display on its display in the second page of "Pan/Routing". The button **DONE** serves only to disappear this page, callable with the current settings at any time.

The only difference lies in the version of Yamaha's lack of buttons **D** (Direct) of channels 9-12, due to a bug of software of the Mixer Yamaha (ambiguity of the messages so it cannot be implemented via MIDI).

Pregarding the routing of signals on the option card (ch 17-24), currently the software does not implement them.



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Menu

File

- **New**: (<CTRL+N> or <ALT+F> and <N>) is currently not possible to have multiple windows open simultaneously with different settings, so each new file as every time you open a file, the previous file will be closed. You are prompted to save the current file first and if it is that case then see **menu Salva**. Then open a new window that is the initial window exception made for the selection of MIDI drivers already made and preserved, and the current mode of transmission or reception.

IMPORTANT: this version is adopted a method of reading and writing files that includes the addition of new parameters that can be saved in the file implemented in future versions. Since version 3.01, the first one allows the saving of files, new controls were implemented, and this unfortunately does not permit the use by the new version, files saved with earlier versions. To use a major library already saved them, you must open its files with Notepad in Windows, and another notebook with the read-only file Init00memory.01v. Tile Horizontally will be fairly easy to identify the formal differences of blocks (length and order) and then copying the tail of the new file ("Future saved parameters ...") and pasting it to the old. Finally, save the old file with the same or different name but always with the extension *. 01v (all files) and *. txt (Text Document). If in doubt, just send the files to be converted to CENZWORKS2K.

- **Open** : (<CTRL+O> o <ALT+F> e <O>) Open a file [**.01v*] existing (and formatted according version 3.3 and subsequent), possibly after save and close the current. Currently the file *.01v are not compatible with earlier versions of the program and could create problems with its unexpected closure of the program. No problem for PC or the mixer. Re-run the software. As for the types of parameters refer to the saved file "SavedFiles.pdf".
- **Close**: <CTRL+W> or <ALT+F> and <C>) Close active window with opportunity to save it. Thus it becomes possible to create a new file or open an existing one. Pressing button  of the secondary window is not possible to save the file before!
- **Save**: (<CTRL+S> or <ALT+F> and <S>) Save the active file without prompt. If there is a new file or the initial opening the Save As dialog box for choosing the name. As for the types of parameters refer to the saved file "SavedFiles.pdf".
- **SaveAs**: (<CTRL+A> or <ALT+F> and <V>) Save with chosing name. As for the types of parameters refer to the saved file "SavedFiles.pdf".
- **Exit** : (<ALT+F> and <E>) Close software asking to save actual file. In addition to this menu, the program is closed by pressing the button **EXIT** or the close symbol of main window .

MIDI

- **Options**: show initial window for select MIDI drivers
- **Transmit**: (<CTRL+T>) The same of button **SELECT OUT** active transmission of data MIDI to the Yamaha.
- **Receive**: (<CTRL+R>) The same of button **SELECT IN** active reception of data MIDI from the Yamaha.
- **Bulk Dump**: (<CTRL+B>) Open the window for BulkDump operations.

Preferences

- **Save preferences** save on (hide) file **pref.00v** actual preferences selected.
- **Show splash screen on startup** show or hide initial window in the boot of software
- **Show MIDI panel on startup** *actually disabled and no desectable.*
- **Load on start up last saved effects library** after editing in the software some libraries of effects (currently Reverb only type) is possible and useful to reload automatically every run of the software.
- **BulkDumpViewHexAndDec** if selected each time you run the software, the control boxes for display of MIDI data in Hex and Decimal format will be active, resulting in substantial increase in time for the receipt and opening data files Memory Scenes.

MEMORY

- **Recall and edit tilte scenes:** (<CTRL+M>) Activated only in the mode **TRANSMIT** , brings up the window to retrieve the stored scenes on the Yamaha and possibly to change its name. Only default scene (00) is called parametrically also in the software. Others are invoked only on the Yamaha.

UTILITY

- **All channels off:** (<CTRL+F>) Switch off all 24 channels, the Bus master, the Aux Master, the Return Effect 1 and 2, the Master Effect and the Master Stereo Out.
- **All channels On:** (<CTRL+G>) Switch on the same.
- **All faders -inf:** (<CTRL+I>) Down all channel's faders 1-24 but no the effects, aux and Masters.

VISUALIZE

- **Background Light:** change the background of the main window in very light gray
- **Background Grey:** change the background of the main window in light gray
- **Background Grey2:** change the background of the main window in dark gray
- **Background Dark:** change the background of the main window in very dark gray
- **BackDarkBlue:** change the background of the main window in dark blu
- **Back Black:** change the background of the main window in black
- **Background Jpg Grain:** change the wallpaper with an image reminiscent of the Yamaha
- **Background jpg grain Dark:** change the wallpaper with an image 'elephant skin', is the current default background.

EFFECTS

- **Effects window**: (<CTRL+E>) Open effect window

ROUTING

- **Routing window**: (<CTRL+D>) Open routing window for route signals that can be minimized or closed and eventually reopened later.

? ?

- **Manual PDF (ITA)**: (<F1>) Open Italian PDF manual
- **Manual PDF (ENG)**: Open this manual
- **MIDI Implementation Tables** - complete list of all the existing implementations, and those of future implementations and of those that are not possible
- **Saved parameters PDF**: list of parameters and files that can be saved
- **Cerca upgrade sul sito (ITA)**: Opens the italian page dedicated to the software on the site www.vincenzogrossi.it to see if there is a new version (which from now on must be obtained from the author and do not auto send)
- **Search for upgrade (ENG)**: The english version of same page
- **Version**: shows the initial window that contains the version number.

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NOTES

They would like to stress the program bugs, requests for specific improvements, measurements errors and omissions in this manual, Setup problems and so on.

The **Cenzworks2k** does not assume any liability for damage caused to persons or objects from improper use of the program and lack of vision of the information provided in this manual.

It is not authorized by the copying, printing, modification and unauthorized disclosure of the program and this manual, as well as the related tables.

Every file related to this program is marked uniquely cryptographically which identifies the legitimate user.

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