INSTALLATION / LAUNCHING

We have prepared software generator for easy creation of SysEx messages for programming of MXC-200 converter. Any programming message or message for display control can be created with this generator without difficult calculation of hexadecimal numbers.

Generator is based on Java scripts so it is possible to use it with any operation system, but a web browser must be installed on the computer.

The program is available on manufacturer's web pages: www.chd-el.cz. It is necessary to copy "MXC-200_index.html", "MXC-200_system.html", "MXC-200_output.html", "MXC-200_value.html", "MXC-200_display.html", "MXC-200_help.html" files and subfolder "media" from the "MXC-200v1_syxgen.zip" file to selected folder on your computer's hard disk. Launching of SysEx Messages generators system can be then done by simple opening "MXC-200_index.html" file in a browser.

SETTING AND PROGRAMMING OF PARAMETRS

After "MXC-200_index.html" file is opened, window with menu of generators is shown. Requested generator starts after clicking on corresponding "Go" button in "Launch" column.

System Parameters :

Systems parameters control basic functions of MXC-200.

Names of parameters are in left column of generator's table. Values of parameters can be selected in select-boxes in middle column of the table.

"Device ID" is necessary. ID number must be the same as number of actual receiving MIDI channel or universal ID can be used. Universal ID will be accepted anytime by MXC-200 independently on MIDI channel setting.

Select-box "Select Msg Type" selects type of generated message: "**Bulk Dump Data Load**" for permanent changes of parameters values in system memory bank or "**Bulk Dump Data Request**" for inquiry for actual content of system memory bank (immediately after that message receiving, the device will transmit "**Bulk Dump Data Load**" SysEx message as response).

"Generate" button generates SysEx message for permanent changes of all parameters in internal memory ("**Bulk Dump Data Load**") or for inquiry for values of all system parameters in internal memory ("**Bulk Dump Data Request**") in dependence on setting of "Select Msg Type" select-box. Values of all parameters must be set before "**Bulk Dump Data Load**" message creating! For "**Bulk Dump Data Request**" message, the parameter values need not be set because this type of message don't use them.

MIDI System Exclusive Messages are generated in hexadecimal form as a text. Text form of hexadecimal numbers can be chosen by "Hex Byte Form" select-box, delimiter between bytes can be chosen by "Delimiter" select-box. Then it is necessary to transfer the message from text field of the generator to SysEx Msg editor of any musical software (DAW) and then to transmit it to MXC-200. Text of generated message can be transferred by clipboard for example: Select the text by mouse (cursor), copy it to clipboard by pressing Ctrl+C keys and paste it into editor of musical software by pressing Ctrl+V keys.

"Reset" button clears the text field and sets all select-boxes to default values.

"Back" button in lower left corner of the table closes generator window and returns index window.

"Help" button in lower left corner of the table opens new window with brief help.

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Output Parameters :

Output parameters control individual outputs (DMX channels) directly.

Names of parameters are in left column of generator's table. Values of parameters can be selected in select-boxes in middle column of the table.

"Device ID" is necessary. ID number must be the same as number of actual receiving MIDI channel or universal ID can be used. Universal ID will be accepted anytime by MXC-200 independently on MIDI channel setting.

Number of requested output (DMX channel) is necessary too ("Select Output Nr."). It specifies output (DMX channel) for changes of parameters ("**Bulk Dump Data Load**" message generating) or for reading of parameters ("**Bulk Dump Data Request**" message generating).

Select-box "Select Msg Type" selects type of generated message: "**Bulk Dump Data Load**" for permanent changes of parameters values in chosen output memory bank or "**Bulk Dump Data Request**" for inquiry for actual content of chosen output memory bank (immediately after the message receiving, the device will transmit "**Bulk Dump Data Load**" SysEx message as response).

"Generate" button generates SysEx message for permanent changes of all parameters of selected output in internal memory ("**Bulk Dump Data Load**") or for inquiry for values of all parameters of selected output in internal memory ("**Bulk Dump Data Request**") in dependence on setting of "Select Msg Type" select-box. Values of all parameters must be set before "**Bulk Dump Data Load**" message creating! For "**Bulk Dump Data Request**" message, the parameter values need not be set because this type of message don't use them.

MIDI System Exclusive Messages are generated in hexadecimal form as a text. Text form of hexadecimal numbers can be chosen by "Hex Byte Form" select-box, delimiter between bytes can be chosen by "Delimiter" select-box. Then it is necessary to transfer the message from text field of the generator to SysEx Msg editor of any musical software (DAW) and then to transmit it to MXC-200. Text of generated message can be transferred by clipboard for example: Select the text by mouse (cursor), copy it to clipboard by pressing Ctrl+C keys and paste it into editor of musical software by pressing Ctrl+V keys.

"Reset" button clears the text field and sets all select-boxes to default values.

"Back" button in lower left corner of the table closes generator window and returns index window.

"Help" button in lower left corner of the table opens new window with brief help.

Output Value Setting :

These SysEx messages allow direct controlling of values sent to device's outputs (DMX channels).

"Device ID" is necessary. ID number must be the same as number of actual receiving MIDI channel or universal ID can be used. Universal ID will be accepted anytime by MXC-200 independently on MIDI channel setting.

Select-box "Select Output Nr." selects type of generated message: "**1**" to "**200**" for control of individual outputs value or "**All Default**" for setting of all outputs to their default values (the same status as after the device reset).

"Generate" button generates SysEx message in dependence on setting of "Select Output Nr." select-box. Value of an output must be set before "**1**" to "**200**" message creating! "**All Default**" message type doesn't require the value setting.

MIDI System Exclusive Messages are generated in hexadecimal form as a text. Text form of hexadecimal numbers can be chosen by "Hex Byte Form" select-box, delimiter between bytes can be chosen by "Delimiter" select-box. Then it is necessary to transfer the message from text field of the generator to SysEx Msg editor of any musical software (DAW) and then to transmit it to MXC-200. Text of generated message can be transferred by clipboard for example: Select the text by mouse (cursor), copy it to clipboard by pressing Ctrl+C keys and paste it into editor of musical software by pressing Ctrl+V keys.

"Reset" button clears the text field and sets all select-boxes to default values.

"Back" button in lower left corner of the table closes generator window and returns index window.

"Help" button in lower left corner of the table opens new window with brief help.

Display Data :

These SysEx messages allow device's display control. Any text can be shown on the display by user.

"Device ID" is necessary. ID number must be the same as number of actual receiving MIDI channel or universal ID can be used. Universal ID will be accepted anytime by MXC-200 independently on MIDI channel setting.

Select-box "Select Msg Type " selects type of generated message: "**Show Data**" for displaying of own text on device's display, "**Clear Data**" for clearing of whole display (spaces are displayed on all positions) or "**Cancel**" for canceling of own text displaying.

"Generate" button generates SysEx message for displaying of own text or for clearing the display or for canceling this function in dependence on setting of "Select Msg Type" select-box. Data of all displayed characters must be set before "**Show Data**" message creating! "**Clear Data**" and "**Cancel**" message types do not require the characters setting.

ASCII characters shown on display can be chosen by select boxes in second column of generator table (for upper row of the display) and in third column of generator table (for lower row of the display). Valid ASCII codes and correspond characters are in table below.

MIDI System Exclusive Messages are generated in hexadecimal form as a text. Text form of hexadecimal numbers can be chosen by "Hex Byte Form" select-box, delimiter between bytes can be chosen by "Delimiter" select-box. Then it is necessary to transfer the message from text field of the generator to SysEx Msg editor of any musical software (DAW) and then to transmit it to MXC-200. Text of generated message can be transferred by clipboard for example: Select the text by mouse (cursor), copy it to clipboard by pressing Ctrl+C keys and paste it into editor of musical software by pressing Ctrl+V keys.

"Reset" button clears the text field and sets all select-boxes to default values.

"Back" button in lower left corner of the table closes generator window and returns index window.
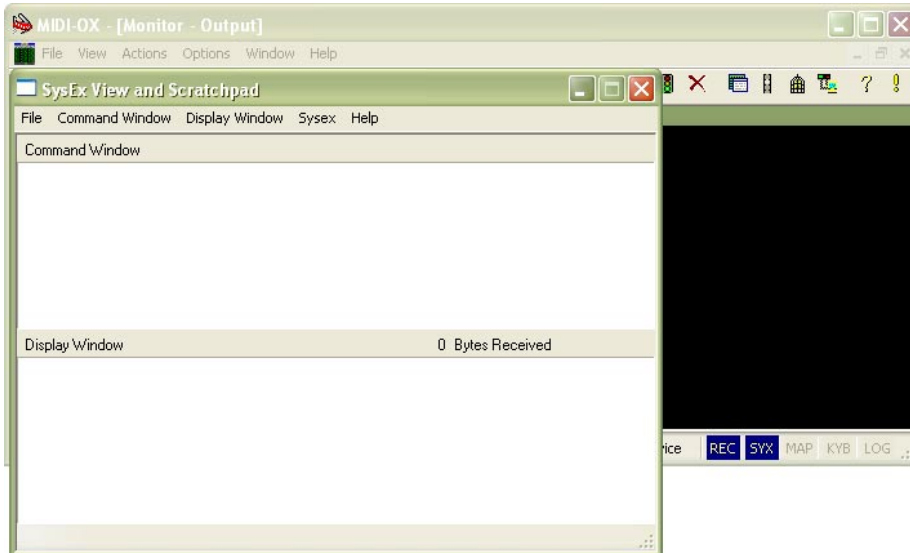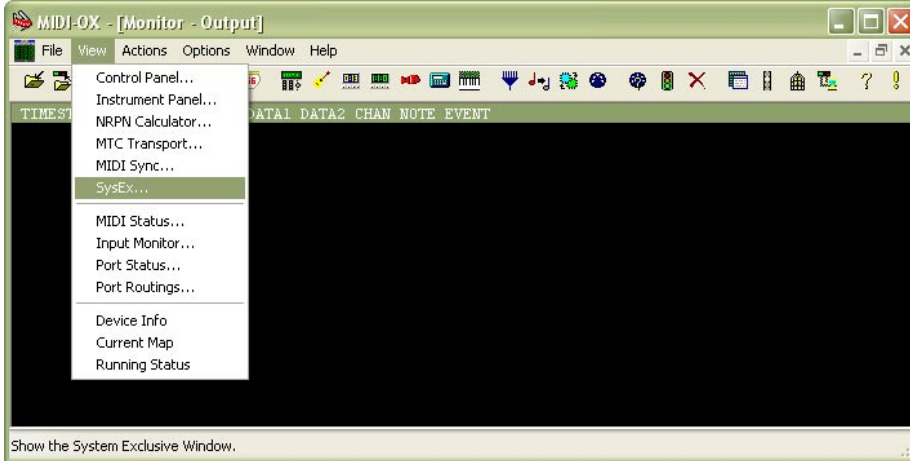
"Help" button in lower left corner of the table opens new window with brief help.

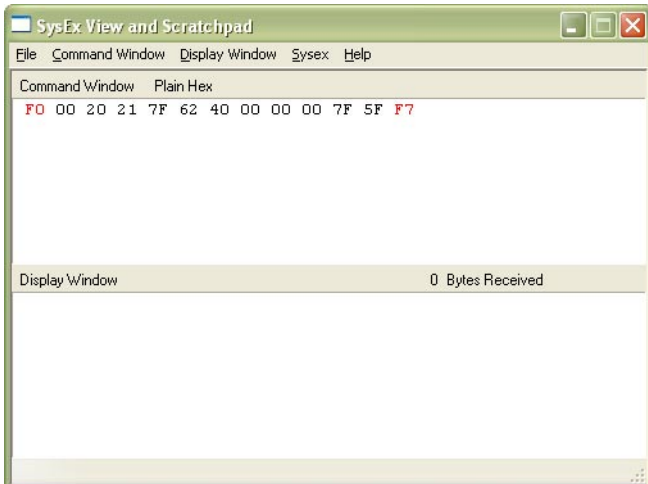| Characters for display (ASCII codes)											
Data	Char	Data	Char	Data	Char	Data	Char	Data	Char	Data	Char
32	space	48	0	64	@	80	P	96	'	112	p
33	!	49	1	65	A	81	Q	97	a	113	q
34	"	50	2	66	B	82	R	98	b	114	r
35	#	51	3	67	C	8	S	99	c	115	s
36	$	52	4	68	D	84	T	100	d	116	t
37	%	53	5	69	E	85	U	101	e	117	u
38	&	54	6	70	F	86	V	102	f	118	v
39	'	55	7	71	G	87	W	103	g	119	w
40	(	56	8	72	H	88	X	104	h	120	x
41	)	57	9	73	I	89	Y	105	i	121	y
42	*	58	:	74	J	90	Z	106	j	122	z
43	+	59	;	75	K	91	[	107	k	123	{
44	,	60	=	76	L	92	\	108	l	124		
45	-	61	<	77	M	93	]	109	m	125	}
46	.	62	>	78	N	94	^	110	n		
47	/	63	?	79	O	95	_	111	o		

EXAMPLE OF USING WITH "MIDI-OX" SOFTWARE

If you haven't installed a software sequencer in your PC, MIDI-OX program is useful tool for transfer of generated System Exclusive Messages to MXC-200. You can download MIDI-OX freeware from **http://www.midiox.com/**
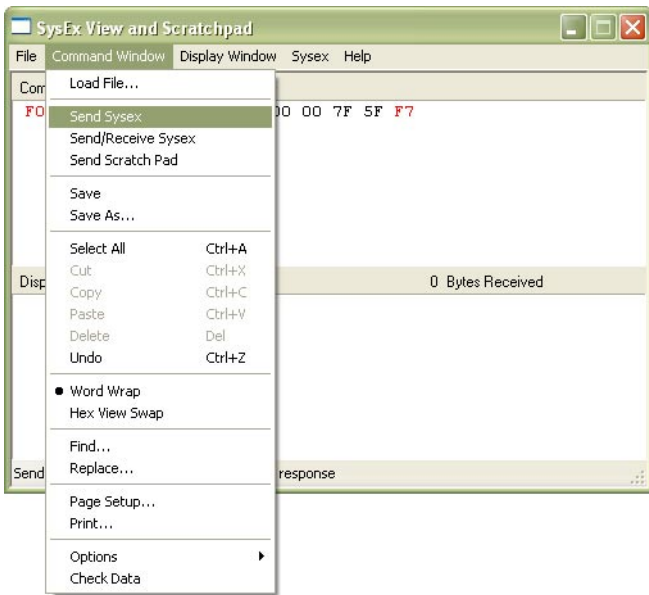
1) Interconnect MIDI output of PC with MIDI input of MXC-200 converter and switch the device on.
2) Open SysEx window in MIDI OX (choose "SysEx…" in "View" menu):

3) Generate required SysEx Msg and copy it into clipboard as described above.
4) Click on text field "Command Window" in "SysEx View and Scratchpad" window and insert generated SysEx Msg into the field by Ctrl+V keys pressing.
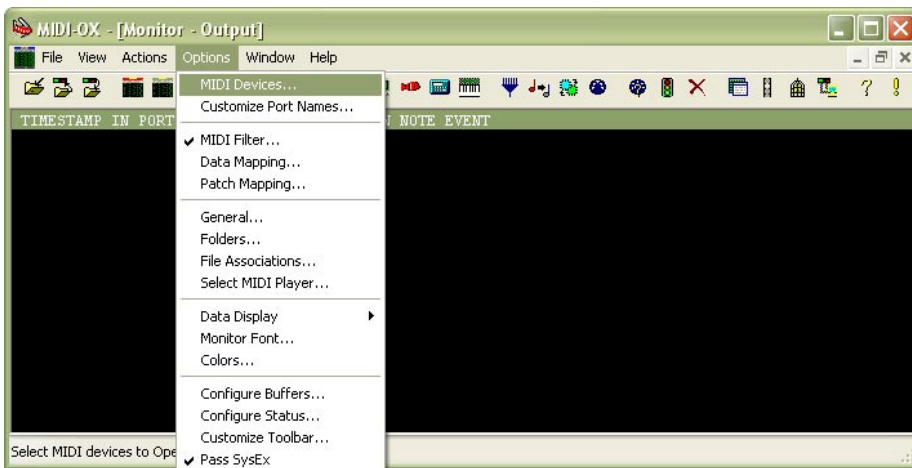

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5) Transmit the message to the device by clicking on "Send Sysex" command in "Command Window" menu.

If MIDI-OX is used first time, it is necessary to activate MIDI port to which MXC-200 converter is connected. It must be done for proper data transfer from PC to the interface.

1) Open window for port selection in MIDI OX - select "MIDI Devices" in "Options" menu:

2) For MIDI port activation, click on name of the port in "MIDI Outputs" list.