

# MAX CONTROL SOFTWARE

# **USER'S GUIDE**

MANUAL PART NUMBER: 400-0102-001





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## SOFTWARE

Page

## **TABLE OF CONTENTS**

ROTATE	2
ROTATE TABS	2
PRESETS	2
PLAY/STOP	2
INPUT TO ROTATE	2
OUTPUT TO USE	2
PRESET CONTROL	3
INTERVAL	3
COUNTDOWN	
SAVE CONFIGURATION	3
OUTPUT COMMANDS	3
CONTROL	4
INPUT	4
OUTPUT	5
SELECT	5
CLEAR	
RESET	5
SELECT LEVELS	5
COMMAND COM PORT	5
SAVE CONFIGURATION	5
ID CONTROL	5
FEEDBACK	5
SETUP	7
SWITCHER CONTROL	7
COM PORT	7
BAUD RATE	7
MATRIX SIZE	7
INPUTS	7
OUTPUTS	7
PROGRAM	7
SET ID	7
SYNC DELAY	7
FACTORY RESET	8

	-
SAVE CONFIGURATION	8
LABELS	9
LABEL TAB	9
PRESET LABEL	9
INPUT LABEL	9
OUTPUT LABEL	9
SAVE CONFIGURATION	9
PROGRAM	11
PROJECTOR CONTROL	11
INPUT 1	11
RGB	
VIDEO	
S-VIDEO	12
OUTPUT SELECT	12
BAUD RATE	12
PROGRAM MAX	12
PROGRAM TEST	12
SAVE CONFIGURATION	12





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### ROTATE

🚛 MaxControl						
Rotate	Control	Setup	Labels	Program	About	
Presets						
Preset1	Preset2	Preset3	Preset4			
Play	Play	Play	Play			
Input to Rota	te					
Input1	Input2	Input3	Input4			
Input5	Input6	Input7	Input8			
Cutput to use	,			 Loaded config	outation	
Output1	Output2	Output3	Output4	< default >	Jonation	
Command:						
				Save Confi	guration	
Preset Control RESTART PLAY STOP BACK FORWARD 30 30						

### Rotate Tab

This tab is selected when you want to switch different input sources to any of the available outputs at a predetermined time interval. This is useful to avoid burn in of the CRT on the monitor or projector. Full control over the rotation of inputs is provided and multiple presets can be saved to the computer's hard disk for later recall.

#### Presets

This program has four presets. Each of the presets can be saved on the hard disk for later recall. Once the preset is selected, assign the output number that this preset will control. You can also assign which inputs will be rotated to the selected output. If two presets point to the same output, only one output can be in PLAY mode.

#### Play/Stop

If you are using preset status buttons, you can quickly play or stop preset. These buttons will show Stop if the specific preset is not rotating or they will show Play if the preset is rotating.

#### Input to Rotate

You can select which input you will rotate. The selection is additive. Pressing once selects input to rotate, pressing the same button again, deselects the input. Selection and de-selection of the inputs can be done at any time during the operation of the software. Inputs to rotate can be added or subtracted even if the current preset is rotating.

#### Outputs to use

Each preset controls only one output. The selection of outputs is mutually exclusive. The same outputs can be assigned to different presets, but only one preset can be active at any time. This means that PLAY is active.



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#### Preset Control

You can control and test the sequence step by step using the BACK and FORWARD buttons. To start the sequence from the beginning, press the RESTART button. To start the sequence from its current location, press the PLAY button. To stop the sequence, press the STOP button.

#### Interval

You can set any time interval in seconds between the different input selections. The default interval is 30 seconds. To change the time interval, click on the window and type a new interval value.

#### Countdown

Countdown is used to see how many seconds are left before the switch will occur. You can not change the countdown value. By pressing the RESTART button, you can reset the countdown value to the Interval value.

#### Save Configuration

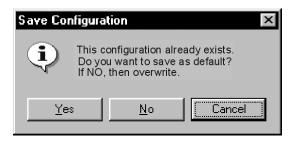
Once all of the presets are programmed, save the configuration in the file. Type a new name for the rotation configuration and press the Save configuration button. If you previously saved configurations, they will be listed in the box above the Save button.

#### Output Commands

The Output commands window is located above the Preset control buttons. When commands are executed, this window shows the command structure that was sent to the switcher. This can be used for troubleshooting or as feedback indicating that the program is working properly.

Save Co	nfiguration 🔀
$\underline{\Lambda}$	Please, enter configuration name or select from the list.
	(OK)

This screen is shown if you try to save configuration, but did not enter the name of the configuration.

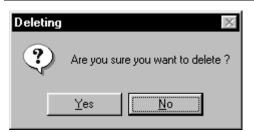


This screen is shown if the file name you entered already exists. To overwrite it, click NO. To save it as default, click YES. The default file is automatically loaded when the program is started.



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If you are trying to delete any of the configurations, the screen above will require you to confirm the action.

🚛 MaxControl					_ 🗆 ×
Rotate	Control	ि Setup	Labels	Program	About
Input Input2 Input2 Input3 Input4 Input5 Input6 Input7 Input8	C 0 O C A C S		C Video C Both C Custom Clear Clear Reset	Loaded config < default >	guration
	Port Configural	IF H / V IF		Save Confi	guration
					\

#### Control

The Control tab is used to switch inputs to outputs on the MAX Switcher. The switcher can be reset if needed. Any level of the MAX Switcher can be switched independently if required. Once the switcher is set to a specific configuration, this configuration can be stored on the hard disk and later be used for presentation purposes.

#### Input

Input buttons are used to select input that is connected to a specific output. When the letters on the input button are pressed, they are set to BOLD. This way you know which input was selected. Although the input is selected, the switch will not occur until the output button is pressed.





### Output

Output buttons are pressed to complete the switch action. If the input was selected, the output buttons can be pressed to connect that input to the desired output. Any number of outputs can be selected to connect to a specified input. Once the output button is pressed, the selected input name will appear to the right of the pressed output.

#### Select

You can click on any of the available options to determine which levels you want to control. If Audio is selected, you will control AR and AL levels only. If Video is selected, you will control RGBHV only. If both are selected, you will control all channels simultaneously. If custom is selected, then you will control the channels that are selected in the Select Level box.

#### Clear

When you press the Clear button, the letters on this button become BOLD. By selecting the desired output button, you can turn OFF that particular output.

#### Reset

The Reset button is used to send reset signals to the switcher. The reset signal places the switcher in the same state as when it was just turned on. Typically, this button is used to quickly clear the switcher. Keep in mind that during the reset mode, memory #1 of the internal switcher is recalled. To clear all outputs, first you should clear memory #1 from the front panel.

#### Select Levels

This option allows you to control each level of the MAX Series Switcher independently. Some of the levels are linked together and can not be controlled separately. These levels are H & V. The MAXControl software will not allow you to switch these levels separately. Since each level is switched independently, you can save the status of the switcher and it will remember the switch configuration for each layer.

#### Command Com Port

The Command Com Port window provides information on signals sent to the switcher. Any command sent to the switcher will be echoed to that window. This can be used as a training tool to learn which command should be issued for specific switching.

#### Save Configuration

Save configuration allows you to save the status of the switcher on the hard disk of the computer. Once the status is saved, it can later be recalled by double clicking on the file name that you want to recall. Save configuration does not affect the switcher's status nor does it switch the switcher or save any information in the switcher. The internal switcher's memory is limited to one level memory and will not allow you to save independent levels.

#### ID control

ID control is used when multiple switchers are controlled from the same RS-232 port. Select ID 0 if you do not want to control any switchers. Select ID 1 if you want to control ALL switchers. Select ID 2, 3, etc. if you want to control individual switchers.

#### Feedback

To activate feedback, move the mouse to the feedback area, press and hold the Shift Control Alt, and click the right mouse button. Press the On button, to turn ON the feedback.







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🗐 MaxControl					_ 🗆 X
Rotate	Control	Setup	Labels	Program	About
	C 4 C 5 Additive	C 2 C 3 C 6 C ℝ U H/V IV	Select C Audio C Video Both C Custom Clear Clear Reset AL / AR Send Clear	Loaded confi < default > Save Conf Switcher Fee Feedback C	iguration
HaxControl         Rotate         Switcher Control         Com port         Com 2         Disable         Baud Rate         9600         4800         2400		Prog	s 0 4 3 0 1 uts 0 2 2 0 3 4 0 4 0 5 gram Progra	Loaded (	About About





#### Setup

The Setup tab is used to control communication between the computer and the MAX Switcher. In addition, the Setup tab provides the ability to configure the number of inputs and outputs, ID number, and sync delay value. Multiple memories are provided to save and restore specific configurations.

#### Switcher Control

These checked boxes allow you to select the communication port number for connection between the computer and the MAX Switcher. Typically, Com port 1 will be used; however, in some cases you may need to set it to Com port 2 if you used the mouse in Com port 1.

#### Com port

Select COM port 1 or 2. If you select COM port Disable, then the software is switched into demo mode and it does not address any of the COM ports. On some computers, COM port 1 is called port A and COM port 2 is called port B.

#### Baud Rate

Select baud rate to communicate with the MAX Switcher. When baud rate is selected, make sure that the MAX Switcher is at the same baud rate as the software. If the software's baud rate is different from switcher's baud rate, the communication between the computer and the switcher will fail.

#### Matrix Size

In this area, you can select the matrix size of your switcher. The maximum size is 8x4 and the minimum size is 4x2. Generally, the MAX Switcher is programmed at the factory to the required size; however, if necessary you can adjust the switcher from this screen.

#### Inputs

Select the number of inputs required.

#### Outputs

Select the number of outputs required.

#### Program<sup>1</sup>

The Program buttons allow you to save specific information into the switcher's memory. Once the program button is executed, this information is saved in the switcher's non-volatile memory. This means every time the switcher is turned on, the setting that was previously saved, will remain the desired setting. The password for Program functions is always: 12345

#### Set ID

Set ID allows you to set different ID numbers to the MAX Switcher. By using different ID numbers, multiple MAX Switchers can be controlled from one computer.

#### Program<sup>1</sup>

Program buttons allow you to save specific information into the switcher's memory. Once the program button is pressed, this information is saved in the switcher's non-volatile memory. This means every time the switcher is turned on, the setting that was previously saved, will remain the desired setting. The password for Program functions is always: 12345

#### Sync Delay

Sync delay allows you to set the delay time between turning the sync on and connecting the video to the projector. This function is especially important when you want to make sure that switching is clean and does not introduce noise on the screen. The switching process goes as follows: video is turned OFF, sync is turned OFF, channel sync is turned ON, pauses for SYNC DELAY time, and turns video ON.

<sup>1</sup> Password protection (Programming password is: 12345)



### Factory Reset<sup>1</sup>

The Reset button is used to send factory reset signals to the switcher. This reset signal erases all settings in the MAX Switcher.

#### Save Configuration

The Save Configuration button allows you to save set up information on the disk. When the program is started, it will automatically load the default switcher status. You can then load a new status and download it to the switcher.

E Progress
Programming in progress. Please wait

The progress bar above shows the progress of programming the switcher. Some operations may take as long as 5-10 seconds to complete.

🚛 MaxControl				_ 🗆 ×
Rotate	Control	Setup	Labels	Program About
Preset Label: Preset1	s Preset2	Preset3	Preset4	
Input Labels				
Input1	Input2	Input3	Input4	
Input5	Input6	Input7	Input8	
Output Label	s			<ul> <li>Loaded configuration —</li> <li>&lt; default &gt;</li> </ul>
Output1	Output2	Output3	Output4	
				Save Configuration



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#### Labels

This tab allows the user to assign different names to the buttons used in the Rotate and Control tabs. In many cases it is much easier to work with names like COMPUTER 1, MAC 1, or VGA1 rather than with input 1, input 2, and so on. In this case you can assign names to each of the inputs, outputs, and presets and then save the assignment. Later you can recall name assignments. You can have many different name assignments stored on the hard disk and recall only the one you need to work with at a particular time. You can also make any saved configuration a default configuration. This will prompt the MAX Control to load the configuration every time it starts.

#### Preset Labels

Assign names to the preset buttons. Click your mouse on the text box and type a new label.

#### Input Labels

Assign names to the input buttons tabs. Click your mouse on the text box and type a new label.

#### **Output Labels**

Assign names to the output buttons. Click your mouse on the text box and type a new label.

#### Save Configuration

This button allows you to save name assignments to all buttons. Once these assignments are saved, they can be recalled at any time by double clicking on the selection. If the name of the file is "default" then this file will be used when MAX Control begins.

🚛 MaxControl										
Rotate	Control	Setup	Labels	Program	About					
- How to program	How to program									
projector using	I when you need t the MAX switcher gramming the MA	. The key	Since MAX switcher can control two projectors, make sure to select output number two when doing programming for a second projector.							
RGBHV, Video, 2. Determine w projector 3. Determine w	n input of the MAX , or S-Video hat baud rate is no hat code is used t en different input	eeded to control o switch	Once all commands that control projector are entered, save the file for future use. Press Program button to start programming, the software will ask for password. This is done to avoid an accidental programming of the MAX switcher. The password is : 12345. Depending on the amount of programming and baud rate selected, the code downloading may take from 10 to 60 seconds.							
programming. T ASCII format or need to be enter	ermined, you can he programming c in HEX format. If l ared prefix number in type 1 as ASCII	an be done in HEX number with \$. For	When programming is complete, you can test the MAX switcher by pressing input and output buttons and observing the commands sent by the MAX switcher. You can select to see returned commands in HEX or in ASCII format. Some ASCII							
Make sure that the baud rate of the projector you need to control matches the baud rate programmed into the MAX switcher. The MAX switcher can be controlled using one baud rate and control projector using different baud rate.										
				Start						





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🚛 MaxControl					
Rotate	Control	Setup	Labels	Program	About
<ul> <li>Projector Contr <ul> <li>Input 1</li> </ul> </li> </ul>	ol			- Output Select	
		💿 RGB 🔿 Vide	eo 🔿 S-Video		
Input 2		<u>м</u>	9	Baud Rate © 9600	Program
lunut 2	_	💿 RGB 🔿 Vide	eo 🔿 S-Video	C 4800	riogram
Input 3		💿 RGB 🔿 Vide	eo 🔿 S-Video	<ul><li>2400</li></ul>	
Input 4		• RGB • Vide	eo O S-Video		
- Input 5		• RGB • Vide	o C. S.Video		
nput 6	_		0 5 5-VILEU		
		💿 RGB 🔿 Vide	eo 🔿 S-Video		
Input 7		• RGB • Vide	eo 🔿 S-Video	Loaded configuration of the second	ation
- Input 8		• RGB • Vide	o C. S. Video		
Dn / Off Co	ntrol		0 9 5-VIDEO		_
				Save Config	uration
- Program Test-				• Hex • ASCII	Clear
				S Hex & ASCI	

### Program

This tab is used to program MAX Switchers with projector control codes. There are certain limitations on the projector control and these should be taken into consideration when programming the switcher. The baud rate is limited to 2400, 4800, and 9600 baud. The total number of characters that the MAX Switcher can output is 16 per selected input. Separate characters can be output from port 1 or port 2. Also, each port can use a different baud rate. Keep in mind that the projector control is only implemented when manual switching is used. When a control system is used, you should control the projector using the control system not the switcher.

#### **Projector Control**

This area allows you to write the code, which will be sent out through the RS-232 port when the selected input is connected to output 1 or 2. Outputs 3 and 4 do not produce any control codes.

#### Input 1

All settings apply to input 1. It is important to know which input will have what signal. Once you have determined configurations, you can assign specific commands to a particular input to switch the projector to the same format.

#### RGB

Select RGB if you want to switch the projector to RGBHV mode of operation.



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#### Video

Select Video if you want to switch the projector to composite video mode of operation.

#### S-Video

Select S-Video if you want to switch the projector to composite S-Video mode of operation.

#### Output Select

Select the Output that you want to control. Output 1 corresponds to Port 1 and Output 2 corresponds to Port 2

#### Baud Rate

Set the baud rate at a level in which the MAX switcher will communicate with the projector. The MAX Switcher can control more than one projector from the same port if these projectors are switched into the same mode. This is sometimes needed when two projectors are stacked to increase brightness.

#### Program MAX

When all inputs and outputs are selected, you can program the matrix switcher by pressing the Program MAX button. It takes approximately 30 seconds to program all codes. If a particular input is not used, leave it blank. The blank input will be programmed not to output any signals. The password for the Program functions is always: 12345

#### Program Test

The program test window allows you to test the programming that you have done. By pressing the buttons on the front of the switcher, you can determine which commands will be sent to the projector.

#### Save Configuration

Any number of configurations can be saved. Typically, you can use the projector name to save configuration. In rental applications, you may use any other names that will help you to remember the specific setup.



The screen above shows that some other program is using RS-232 port. If this happens close the program that uses this particular Com port and try again. Keep in mind that the software is switched into demo mode and you may have to select the set up tab and set the port to the required Com port.





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