

8 x 8 HDMI Matrix Switch RS-232 Protocol Manual

Switch (8) HDMI source devices plus IR to (8) HDMI displays.

Supports 1080p 3D HDMI or DVI formats + IR with RS-232 or IR remote control.

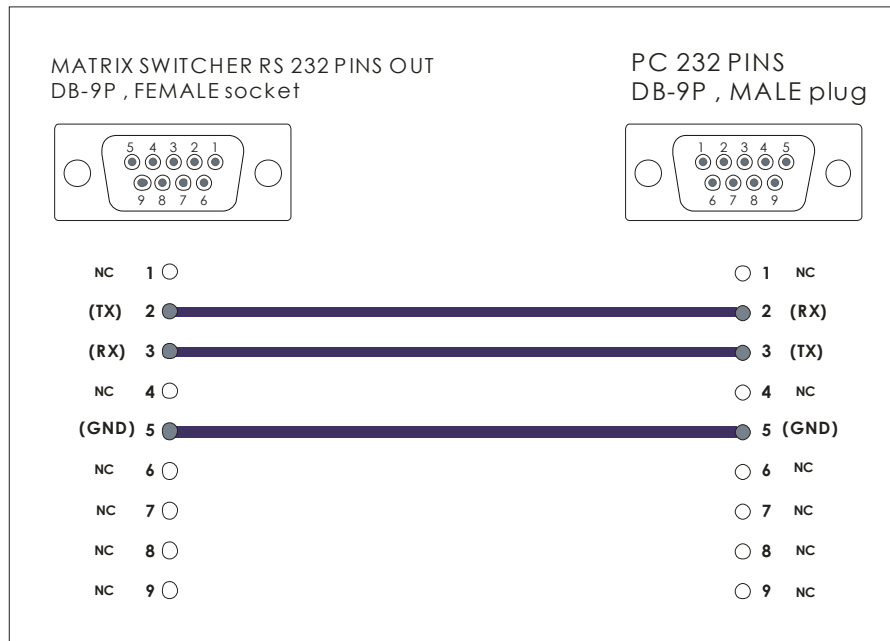


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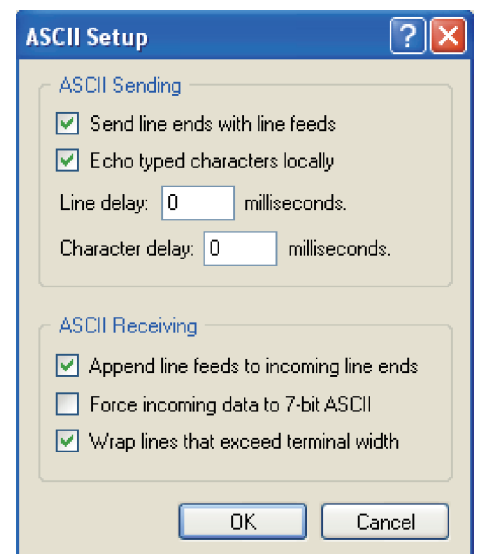
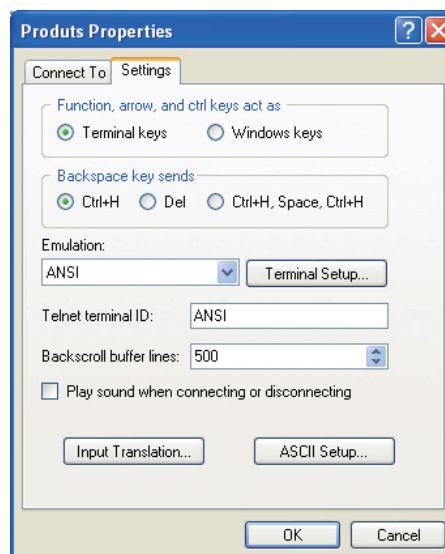
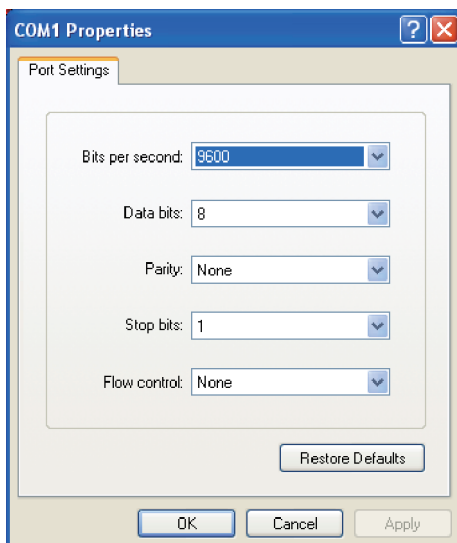
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SB RS232 Protocol and Command

RS232-Cable Pin Lines



1. Transmission rate: 9600bps
 2. Data format: 8 data bits, No parity, 1 start bit and 1 stop bit
 3. Flowing control: None
- Also know as 9600,8,n,1



Data String Format :

The Data String contains four elements.

[Command][][Data][;]

The format is:

1. Command
2. Space
3. Data
4. ;

There is a single space after the Command and before the Data string.

The data string must conclude with an“;” (without the quotes).

All text is full ASCII Code and is NOT case sensitive. You can use either capital letters or small letters and get the same result.

The LINK command must be sent first. This establishes a communications “link” between an external controller (or computer) and the device you wish to control. When you have an established link, communication via the IR port is disabled. The front panel remains operational.

The format is

LINK 01; This will establish the link

Your commands

LINK 00; This will terminate the link

Devices that are firmware version x.x or higher will return a status.

Status is command dependent.

For example: Response : [SKU][][Status][;]

The Status is a two digit numerical code.

See further in this document for specific details.

Commands

Note: not all commands are supported on all devices.

Item	Command	Description
1	Link	Establish or disable data link between controller and device .
2	Power	Set/Check the status of Power
3	Output[dd]	Set/Check the state of single outputs
4	ActiveSource	Check the status of an Input for a signal present
5	OutputAll	Set/Check the state of all outputs
6	Recall	Recall a saved matrix configuration from memory
7	Recall[mm]	Check the data of memory address
8	Memory	Save the current matrix configuration to memory
9	Lock	Set/Check the status of Lock
10	EDID	Set/Check EDID (HDMI only)
11	SignalFormat	Sets V+A, V only, A only

1.Link

Function	Command	Response	Description
Leave	Link 00;	VSWHDMI8X8B 00;	Leave
		VSWHDMI8X8B 01;	UN-KNOW Command
Link	Link 01;	VSWHDMI8X8B 00;	Link
		VSWHDMI8X8B 01;	UN-KNOW Command
Check Link Condition	Link ?;	Link 00;	System Leave
		Link 01;	System Link

2.Power

Function	Command	Response	Description
Power OFF	Power 00;	VSWHDMI8X8B 00;	Power OFF
		VSWHDMI8X8B 01;	UN-KNOW Command
Power ON	Power 01;	VSWHDMI8X8B 00;	Power ON
		VSWHDMI8X8B 01;	UN-KNOW Command
Check the Status of Condition	Power ?;	Power 00;	Power OFF
		Power 01;	Power ON

3. Output[dd]

Function	Command	Response	Description	
OFF source	OUTPUT01 00;	VSWHDMI8X8B 00;	Output 1 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 00;	VSWHDMI8X8B 00;	Output 2 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT03 00;	VSWHDMI8X8B 00;	Output 3 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 00;	VSWHDMI8X8B 00;	Output 4 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT05 00;	VSWHDMI8X8B 00;	Output 5 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 00;	VSWHDMI8X8B 00;	Output 6 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT07 00;	VSWHDMI8X8B 00;	Output 7 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 00;	VSWHDMI8X8B 00;	Output 8 is OFF	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Set channel status	OUTPUT01 01;	VSWHDMI8X8B 00;	Set output 1 to input 1
			VSWHDMI8X8B 01;	UN-KNOW Command
OUTPUT01 02;		VSWHDMI8X8B 00;	Set output 1 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 03;		VSWHDMI8X8B 00;	Set output 1 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 04;		VSWHDMI8X8B 00;	Set output 1 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 05;		VSWHDMI8X8B 00;	Set output 1 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 06;		VSWHDMI8X8B 00;	Set output 1 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 07;		VSWHDMI8X8B 00;	Set output 1 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT01 08;		VSWHDMI8X8B 00;	Set output 1 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	

3. Output[dd]

Function	Command	Response	Description	
Set channel status	OUTPUT02 01;	VSWHDMI8X8B 00;	Set output 2 to input 1	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 02;	VSWHDMI8X8B 00;	Set output 2 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 03;	VSWHDMI8X8B 00;	Set output 2 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 04;	VSWHDMI8X8B 00;	Set output 2 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 05;	VSWHDMI8X8B 00;	Set output 2 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 06;	VSWHDMI8X8B 00;	Set output 2 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 07;	VSWHDMI8X8B 00;	Set output 2 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT02 08;	VSWHDMI8X8B 00;	Set output 2 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Set channel status	OUTPUT03 01;	VSWHDMI8X8B 00;	Set output 3 to input 1
			VSWHDMI8X8B 01;	UN-KNOW Command
OUTPUT03 02;		VSWHDMI8X8B 00;	Set output 3 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 03;		VSWHDMI8X8B 00;	Set output 3 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 04;		VSWHDMI8X8B 00;	Set output 3 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 05;		VSWHDMI8X8B 00;	Set output 3 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 06;		VSWHDMI8X8B 00;	Set output 3 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 07;		VSWHDMI8X8B 00;	Set output 3 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT03 08;		VSWHDMI8X8B 00;	Set output 3 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	

3. Output[dd]

Function	Command	Response	Description	
Set channel status	OUTPUT04 01;	VSWHDMI8X8B 00;	Set output 4 to input 1	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 02;	VSWHDMI8X8B 00;	Set output 4 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 03;	VSWHDMI8X8B 00;	Set output 4 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 04;	VSWHDMI8X8B 00;	Set output 4 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 05;	VSWHDMI8X8B 00;	Set output 4 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 06;	VSWHDMI8X8B 00;	Set output 4 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 07;	VSWHDMI8X8B 00;	Set output 4 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT04 08;	VSWHDMI8X8B 00;	Set output 4 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Set channel status	OUTPUT05 01;	VSWHDMI8X8B 00;	Set output 5 to input 1
			VSWHDMI8X8B 01;	UN-KNOW Command
OUTPUT05 02;		VSWHDMI8X8B 00;	Set output 5 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 03;		VSWHDMI8X8B 00;	Set output 5 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 04;		VSWHDMI8X8B 00;	Set output 5 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 05;		VSWHDMI8X8B 00;	Set output 5 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 06;		VSWHDMI8X8B 00;	Set output 5 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 07;		VSWHDMI8X8B 00;	Set output 5 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT05 08;		VSWHDMI8X8B 00;	Set output 5 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	

3. Output[dd]

Function	Command	Response	Description	
Set channel status	OUTPUT06 01;	VSWHDMI8X8B 00;	Set output 6 to input 1	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 02;	VSWHDMI8X8B 00;	Set output 6 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 03;	VSWHDMI8X8B 00;	Set output 6 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 04;	VSWHDMI8X8B 00;	Set output 6 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 05;	VSWHDMI8X8B 00;	Set output 6 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 06;	VSWHDMI8X8B 00;	Set output 6 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 07;	VSWHDMI8X8B 00;	Set output 6 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT06 08;	VSWHDMI8X8B 00;	Set output 6 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Set channel status	OUTPUT07 01;	VSWHDMI8X8B 00;	Set output 7 to input 1
			VSWHDMI8X8B 01;	UN-KNOW Command
OUTPUT07 02;		VSWHDMI8X8B 00;	Set output 7 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 03;		VSWHDMI8X8B 00;	Set output 7 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 04;		VSWHDMI8X8B 00;	Set output 7 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 05;		VSWHDMI8X8B 00;	Set output 7 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 06;		VSWHDMI8X8B 00;	Set output 7 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 07;		VSWHDMI8X8B 00;	Set output 7 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
OUTPUT07 08;		VSWHDMI8X8B 00;	Set output 7 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	

3. Output[dd]

Function	Command	Response	Description	
Set channel status	OUTPUT08 01;	VSWHDMI8X8B 00;	Set output 8 to input 1	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 02;	VSWHDMI8X8B 00;	Set output 8 to input 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 03;	VSWHDMI8X8B 00;	Set output 8 to input 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 04;	VSWHDMI8X8B 00;	Set output 8 to input 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 05;	VSWHDMI8X8B 00;	Set output 8 to input 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 06;	VSWHDMI8X8B 00;	Set output 8 to input 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 07;	VSWHDMI8X8B 00;	Set output 8 to input 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUT08 08;	VSWHDMI8X8B 00;	Set output 8 to input 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Check Output status	OUTPUT01 ?;	Output01 01;	Output 1 to input 1
			Output01 02;	Output 1 to input 2
Output01 03;			Output 1 to input 3	
Output01 04;			Output 1 to input 4	
Output01 05;			Output 1 to input 5	
Output01 06;			Output 1 to input 6	
Output01 07;			Output 1 to input 7	
Output01 08;			Output 1 to input 8	
OUTPUT02 ?;		Output02 01;	Output 2 to input 1	
		Output02 02;	Output 2 to input 2	
		Output02 03;	Output 2 to input 3	
		Output02 04;	Output 2 to input 4	
		Output02 05;	Output 2 to input 5	
		Output02 06;	Output 2 to input 6	
		Output02 07;	Output 2 to input 7	
		Output02 08;	Output 2 to input 8	

3. Output[dd]

Function	Command	Response	Description
Check Output status	OUTPUT03 ?;	Output03 01;	Output 3 to input 1
		Output03 02;	Output 3 to input 2
		Output03 03;	Output 3 to input 3
		Output03 04;	Output 3 to input 4
		Output03 05;	Output 3 to input 5
		Output03 06;	Output 3 to input 6
		Output03 07;	Output 3 to input 7
		Output03 08;	Output 3 to input 8
	OUTPUT04 ?;	Output04 01;	Output 4 to input 1
		Output04 02;	Output 4 to input 2
		Output04 03;	Output 4 to input 3
		Output04 04;	Output 4 to input 4
		Output04 05;	Output 4 to input 5
		Output04 06;	Output 4 to input 6
		Output04 07;	Output 4 to input 7
		Output04 08;	Output 4 to input 8
	OUTPUT05 ?;	Output05 01;	Output 3 to input 1
		Output05 02;	Output 5 to input 2
		Output05 03;	Output 5 to input 3
		Output05 04;	Output 5 to input 4
		Output05 05;	Output 5 to input 5
		Output05 06;	Output 5 to input 6
		Output05 07;	Output 5 to input 7
		Output05 08;	Output 5 to input 8
	OUTPUT06 ?;	Output06 01;	Output 6 to input 1
		Output06 02;	Output 6 to input 2
		Output06 03;	Output 6 to input 3
		Output06 04;	Output 6 to input 4
		Output06 05;	Output 6 to input 5
		Output06 06;	Output 6 to input 6
		Output06 07;	Output 6 to input 7
		Output06 08;	Output 6 to input 8

3. Output[dd]

Function	Command	Response	Description
Check Output status	OUTPUT07 ?;	Output07 01;	Output 7 to input 1
		Output07 02;	Output 7 to input 2
		Output07 03;	Output 7 to input 3
		Output07 04;	Output 7 to input 4
		Output07 05;	Output 7 to input 5
		Output07 06;	Output 7 to input 6
		Output07 07;	Output 7 to input 7
		Output07 08;	Output 7 to input 8
	OUTPUT08 ?;	Output08 01;	Output 8 to input 1
		Output08 02;	Output 8 to input 2
		Output08 03;	Output 8 to input 3
		Output08 04;	Output 8 to input 4
		Output08 05;	Output 8 to input 5
		Output08 06;	Output 8 to input 6
		Output08 07;	Output 8 to input 7
		Output08 08;	Output 8 to input 8

4. ActiveSource

Function	Command	Response	Description
Check the status of a signal presence on an Input port	ACTIVESOURCE ?;	ActiveSource 0100;	Input 1=01 so the signal is active.
			Input 2=00 so the signal is inactive.
		ActiveSource 0101;	Input 1=01 so the signal is active.
			Input 2=01 so the signal is active.
		ActiveSource 0000;	Input 1=00 so the signal is inactive.
			Input 2=00 so the signal is inactive.

Note: this does not validate if the signal is within proper format (ex: 1VPP Video), only that one is present and active.

5. OutputAll

Function	Command	Response	Description	
OFF all output	OUTPUTALL 00;	VSWHDMI8X8B 00;	Unlock	
		VSWHDMI8X8B 01;	UN-KNOW Command	
Set all outputs to one source	OUTPUTALL 01;	VSWHDMI8X8B 00;	Set all output to Source 1	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 02;	VSWHDMI8X8B 00;	Set all output to Source 2	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 03;	VSWHDMI8X8B 00;	Set all output to Source 3	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 04;	VSWHDMI8X8B 00;	Set all output to Source 4	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 05;	VSWHDMI8X8B 00;	Set all output to Source 5	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 06;	VSWHDMI8X8B 00;	Set all output to Source 6	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 07;	VSWHDMI8X8B 00;	Set all output to Source 7	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	OUTPUTALL 08;	VSWHDMI8X8B 00;	Set all output to Source 8	
		VSWHDMI8X8B 01;	UN-KNOW Command	
	Check the status of all ouputs	OUTPUTALL ?;	OutputALL 0102030405060708; Response all outputs status	Output1=01 so the output1 to input1
				Output2=02 so the output2 to input2
Output3=03 so the output3 to input3				
Output4=04 so the output4 to input4				
Output5=05 so the output5 to input5				
Output6=06 so the output6 to input6				
Output7=07 so the output7 to input7				
Output8=08 so the output8 to input8				

6. Recall

Function	Command	Response	Description
Recall a saved configuration from memory	RECALL 00;	VSWHDMI8X8B 00;	Recall a saved from memory00
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 01;	VSWHDMI8X8B 00;	Recall a saved from memory01
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 02;	VSWHDMI8X8B 00;	Recall a saved from memory02
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 03;	VSWHDMI8X8B 00;	Recall a saved from memory03
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 04;	VSWHDMI8X8B 00;	Recall a saved from memory04
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 05;	VSWHDMI8X8B 00;	Recall a saved from memory05
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 06;	VSWHDMI8X8B 00;	Recall a saved from memory06
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 07;	VSWHDMI8X8B 00;	Recall a saved from memory07
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 08;	VSWHDMI8X8B 00;	Recall a saved from memory08
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 09;	VSWHDMI8X8B 00;	Recall a saved from memory09
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0A;	VSWHDMI8X8B 00;	Recall a saved from memory10
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0B;	VSWHDMI8X8B 00;	Recall a saved from memory11
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0C;	VSWHDMI8X8B 00;	Recall a saved from memory12
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0D;	VSWHDMI8X8B 00;	Recall a saved from memory13
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0E;	VSWHDMI8X8B 00;	Recall a saved from memory14
		VSWHDMI8X8B 01;	UN-KNOW Command
	RECALL 0F;	VSWHDMI8X8B 00;	Recall a saved from memory15
		VSWHDMI8X8B 01;	UN-KNOW Command
RECALL 10;	VSWHDMI8X8B 00;	Recall a saved from memory16	
	VSWHDMI8X8B 01;	UN-KNOW Command	

7. Recall[mm]

Function	Command	Response	Description
Check the data of memory address	RECALL 00?;	RECALL00 0102030405060708; Note : "RECALL00" means recall from the memory address 1. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 01?;	RECALL01 0102030405060708; Note : "RECALL01" means recall from the memory address 2. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 02?;	RECALL02 0102030405060708; Note : "RECALL02" means recall from the memory address 3. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 03?;	RECALL03 0102030405060708; Note : "RECALL03" means recall from the memory address 4. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8

7. Recall[mm]

Function	Command	Response	Description
Check the data of memory address	RECALL 04?;	RECALL04 0102030405060708; Note : "RECALL04" means recall from the memory address 5. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 05?;	RECALL05 0102030405060708; Note : "RECALL05" means recall from the memory address 6. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 06?;	RECALL06 0102030405060708; Note : "RECALL06" means recall from the memory address 7. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 07?;	RECALL07 0102030405060708; Note : "RECALL07" means recall from the memory address 8. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8

7. Recall[mm]

Function	Command	Response	Description
Check the data of memory address	RECALL 08?;	RECALL08 0102030405060708; Note : "RECALL08" means recall from the memory address 8. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 09?;	RECALL09 0102030405060708; Note : "RECALL09" means recall from the memory address 10. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 0A?;	RECALLoA 0102030405060708; Note : "RECALLoA" means recall from the memory address 11. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 0B?;	RECALLoB 0102030405060708; Note : "RECALLoB" means recall from the memory address 12. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8

7. Recall[mm]

Function	Command	Response	Description
Check the data of memory address	RECALL 0C?;	RECALLoC 0102030405060708; Note : "RECALLoC" means recall from the memory address 13. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 0D?;	RECALLoD 0102030405060708; Note : "RECALLoD" means recall from the memory address 14. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 0E?;	RECALLoE 0102030405060708; Note : "RECALLoE" means recall from the memory address 15. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8
	RECALL 0F?;	RECALLoF 0102030405060708; Note : "RECALLoF" means recall from the memory address 16. "0102030405060708" is the input numbers that is connected to output 1-8, see left side discription.	Output1=01 so the output1 to input1
			Output2=02 so the output2 to input2
			Output3=03 so the output3 to input3
			Output4=04 so the output4 to input4
			Output5=05 so the output5 to input5
			Output6=06 so the output6 to input6
			Output7=07 so the output7 to input7
			Output8=08 so the output8 to input8

8.Memory

Function	Command	Response	Description
Save current matrix configuration to memory address	MEMORY 00;	VSWHDMI8X8B 00;	Save at memory address 00
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 01;	VSWHDMI8X8B 00;	Save at memory address 01
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 02;	VSWHDMI8X8B 00;	Save at memory address 02
		VSWHDMI8X8B8 01;	UN-KNOW Command
	MEMORY 03;	VSWHDMI8X8B 00;	Save at memory address 03
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 04;	VSWHDMI8X8B 00;	Save at memory address 04
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 05;	VSWHDMI8X8B 00;	Save at memory address 05
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 06;	VSWHDMI8X8B 00;	Save at memory address 06
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 07;	VSWHDMI8X8B 00;	Save at memory address 07
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 08;	VSWHDMI8X8B 00;	Save at memory address 08
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 09;	VSWHDMI8X8B 00;	Save at memory address 09
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0A;	VSWHDMI8X8B 00;	Save at memory address 10
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0B;	VSWHDMI8X8B 00;	Save at memory address 11
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0C;	VSWHDMI8X8B 00;	Save at memory address 12
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0D;	VSWHDMI8X8B 00;	Save at memory address 13
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0E;	VSWHDMI8X8B 00;	Save at memory address 14
		VSWHDMI8X8B 01;	UN-KNOW Command
	MEMORY 0F;	VSWHDMI8X8B 00;	Save at memory address 15
		VSWHDMI8X8B 01;	UN-KNOW Command
MEMORY 10;	VSWHDMI8X8B 00;	Save at memory address 16	
	VSWHDMI8X8B 01;	UN-KNOW Command	

9. Lock

Function	Command	Response	Description
Unlock	LOCK 00;	VSWHDMI8x8B 00;	Unlock
		VSWHDMI8x8B 01;	UN-KNOW Command
Lock	LOCK 01;	VSWHDMI8x8B 00;	Lock
		VSWHDMI8x8B 01;	UN-KNOW Command
Check the status of lock	LOCK ?;	Lock 00;	System Unlock
		Lock 01;	System Lock

10. EDID

Function	Command	Response	Description
Set EDID	EDID00 ;	VSWHDMI8x8B 00;	Set EDID to FSS
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID01 ;	EDID01 ;	VSWHDMI8x8B 00;	Set EDID to H24-3D
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID02 ;	EDID02 ;	VSWHDMI8x8B 00;	Set EDID to H24M-3D
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID03 ;	EDID03 ;	VSWHDMI8x8B 00;	Set EDID to H36-No3D
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID04 ;	EDID04 ;	VSWHDMI8x8B 00;	Set EDID to H36M-No3D
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID05 ;	EDID05 ;	VSWHDMI8x8B 00;	Set EDID to H36-3D
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID06 ;	EDID06 ;	VSWHDMI8x8B 00;	Set EDID to H36-3DF
		VSWHDMI8x8B 01;	UN-KNOW Command
EDID07 ;	EDID07 ;	VSWHDMI8x8B 00;	Set EDID to Auto
		VSWHDMI8x8B 01;	UN-KNOW Command

Hex Decimal

Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal
00	0	10	16	20	32	30	48	40	64	50	80	60	96
01	1	11	17	21	33	31	49	41	65	51	81	61	97
02	2	12	18	22	34	32	50	42	66	52	82	62	98
03	3	13	19	23	35	33	51	43	67	53	83	63	99
04	4	14	20	24	36	34	52	44	68	54	84	64	100
05	5	15	21	25	37	35	53	45	69	55	85		
06	6	16	22	26	38	36	54	46	70	56	86		
07	7	17	23	27	39	37	55	47	71	57	87		
08	8	18	24	28	40	38	56	48	72	58	88		
09	9	19	25	29	41	39	57	49	73	59	89		
0A	10	1A	26	2A	42	3A	58	4A	74	5A	90		
0B	11	1B	27	2B	43	3B	59	4B	75	5B	91		
0C	12	1C	28	2C	44	3C	60	4C	76	5C	92		
0D	13	1D	29	2D	45	3D	61	4D	77	5D	93		
0E	14	1E	30	2E	46	3E	62	4E	78	5E	94		
0F	15	1F	31	2F	47	3F	63	4F	79	5F	95		

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