
MX-0804-SCL

12 Slot Seamless Modular Matrix

API Command Set

Version: V1.0.0

RS232 Default Setting

Parameters	Value
Baud Rate	9600 bps
Data bits	8 bits
Parity	None
Stop bits	1 bit
Flow control	None

About Telnet Connection

Before sending the command through telnet, telnet connection to the corresponding device should be established firstly.

To establish telnet connection, send the following Command:

telnet ip (port)

ip: The device's IP address.

port: The device's port number, this is non-required on some Telnet control tools or platforms. By default, the port number is 23.

For example: If the device's IP address is 192.168.10.254, the command for telnet connection should be *telnet 192.168.10.254*

Command

Take Command **SET SW in out<CR><LF>** as an example:

1. **[SET SW]** denotes command key words, case insensitive.
2. **[in out]** denotes parameters, case insensitive; incorrect parameters number will not be recognized.
3. **<CR><LF>** denotes a carriage return or a line feed; all commands must be ended up with a carriage return or a line feed.

No.	Description	Command	Example
Video/Audio Matrix Switch			
1	Switch one Input to one Output	<p>Command: SET SW <i>in out</i><CR><LF></p> <p>Return: <i>SW in out</i><CR><LF></p> <p>Parameter: <i>in</i> = {in0-in8}; in0 indicates output is forbidden <i>out</i> = {out1-out4, all};</p> <p>Description: SW is short for Switch Switch one input source for one output sink</p>	<p>Command: SET SW <i>in1 out1</i><CR><LF></p> <p>Return: <i>SW in1 out1</i><CR><LF></p> <p>Description: Switch in1 for out1</p>
2	Get which input is mapping to the indicate Output	<p>Command: GET MP <i>out</i><CR><LF></p> <p>Return: <i>MP in out</i><CR><LF></p> <p>Parameter: <i>in</i> = {in0-in8}; <i>out</i> = {out1-out4, all};</p> <p>Description: MP is short for mapping Get which input mapping to the indicate Output</p>	<p>Command: GET MP <i>out1</i><CR><LF></p> <p>Return: <i>MP in1 out1</i><CR><LF></p> <p>Description: in1 mapping to out1</p>
3	To execute an Audio Input selection	<p>Command: SET AUDIOIN <i>in prm</i><CR><LF></p> <p>Return: AUDIOIN <i>in prm</i><CR><LF></p>	<p>Command: SET AUDIOIN <i>in1 hdmi</i><CR><LF></p> <p>Return: AUDIOIN <i>in1 hdmi</i><CR><LF></p>

No.	Description	Command	Example
		Parameter: in = {in1-in8}; prm = {hdmi, audioin};	Description: Select the audio from HDMI input for input1
4	To get Audio Input status	Command: GET AUDIOIN in<CR><LF> Return: AUDIOIN in out<CR><LF> Parameter: in = {in1-in8, all}; prm = {hdmi, audioin};	Command: GET AUDIOIN in1<CR><LF> Return: AUDIOIN in1 hdmi<CR><LF> Description: Get the audio source of the in1, the result is hdmi.
5	To set output resolution	Command: SET VIDOUT_RES out prm<CR><LF> Return: VIDOUT_RES out prm<CR><LF> Description: out = {out1~out4} prm = {1~26} { 1: 3840x2160@60 2: 3840x2160@30 3: 1920x1200@60 4: 1920x1080@60 5: 1280x720@60 6: 1600x1200@60 7: 1280x800@60 8: 1024x768@60 9: AUTO (preferred native timing of the display) }	Command: SET VIDOUT_RES out1 5<CR><LF> Return: VIDOUT_RES out1 5<CR><LF> Description: Set HDMI out resolution is 1280x720@60.

No.	Description	Command	Example
6	To get output resolution	<p>Command: GET VIDOUT_RES out<CR><LF></p> <p>Return: VIDOUT_RES out prm<CR><LF></p> <p>Description: out = {out1~out4, all} prm= {101~108} { NULL: Display not detected 0: Display don't support current selected resolution 1: Fix 3840x2160@60 2: Fix 3840x2160@30 7: Fix 1280x800@60 8: Fix 1024x768@60 101: Auto 3840x2160@60 108: Auto 1024x768@60 }</p>	<p>Command: GET VIDOUT_RES out1<CR><LF></p> <p>Return: VIDOUT_RES out1 1<CR><LF></p> <p>Description: out1 resolution is Fix 3840x2160@60.</p>

No.	Description	Command	Example
CEC Control			
1	To execute a sink power by CEC	<p>Command: SET CEC_PWR out prm<CR><LF></p> <p>Return: CEC_PWR out prm<CR><LF></p> <p>Parameter: out = {out1~out4, all}; prm = {on, off}</p> <p>Description: Set sink power on or off</p>	<p>Command: SET CEC_PWR <i>out1</i> <i>on</i><CR><LF></p> <p>Return: CEC_PWR <i>out1</i> <i>on</i><CR><LF></p> <p>Description: Set sink power on</p>
2	Set CEC AUTO POWER ON/OFF	<p>Command: SET AUTOCEC_FN out prm<CR><LF></p> <p>Return: AUTOCEC_FN out prm<CR><LF></p> <p>Parameter: out = {out1~out4, all}; prm = {on, off}</p> <p>Description: Set sink auto power Function ON or OFF</p>	<p>Command: SET AUTOCEC_FN <i>out1</i> <i>on</i><CR><LF></p> <p>Return: AUTOCEC_FN <i>out1</i> <i>on</i><CR><LF></p> <p>Description: Set sink auto power ON</p>

No.	Description	Command	Example
3	Get CEC AUTO POWER ON/OFF Status	<p>Command: GET AUTOCEC_FN out<CR><LF></p> <p>Return: AUTOCEC_FN out prm<CR><LF></p> <p>Parameter: out = {out1~out4, all}; prm = {on, off}</p> <p>Description: Get Sink auto power Function ON or OFF Status.</p>	<p>Command: GET AUTOCEC_FN out1<CR><LF></p> <p>Return: AUTOCEC_FN out1 on<CR><LF></p> <p>Description: Get Sink auto power status, and the status is ON.</p>
4	Set CEC POWER Delay Time	<p>Command: SET AUTOCEC_D out prm<CR><LF></p> <p>Return: AUTOCEC_D out prm<CR><LF></p> <p>Parameter: out = {out1~out4, all}; prm = {1,2,3...},// according to the actual time counter,1 means 1 minute ,2 means 2 minutes, Default wait time is 2 minutes, Max wait time is 30 minutes.</p> <p>Description: AUTOCEC_D is short for CEC auto Power Delay Timing</p>	<p>Command: SET AUTOCEC_D out1 2<CR><LF></p> <p>Return: AUTOCEC_D iout1 2<CR><LF></p> <p>Description: when no active signal to out1, 2 minutes later, the unit will auto power off.</p>

No.	Description	Command	Example
5	Get CEC POWER Delay Time Status	<p>Command: GET AUTOCEC_D out<CR><LF></p> <p>Return: AUTOCEC_D out prm<CR><LF></p> <p>Parameter: out = {out1~out4, all}; prm = {1,2,3...}// according to the actual time counter,1 means 1 minute ,2 means 2 minutes, Default wait time is 2 minutes, Max wait time is 30 minutes.</p> <p>Description: AUTOCEC_D is short for CEC auto Power Delay Timing</p>	<p>Command: GET AUTOCEC_D out1<CR><LF></p> <p>Return: AUTOCEC_D out1 2<CR><LF></p> <p>Description: Get out1 auto power delay time, the result is 2 minutes</p>

No.	Description	Command	Example
EDID			
1	Get EDID DIP status	<p>Command: GET EDID_DIP<CR><LF></p> <p>Return: EDID_DIP <i>prm</i><CR><LF></p> <p>Parameter: <i>prm</i>= {0~15} 0: EDID controlled by Web UI and API 1: 4K@60Hz 4:4:4 8bit 2.0ch audio Without HDR 2: 4K@30Hz 4:4:4 8bit 2.0ch audio Without HDR 3: 1080p@60Hz 4:4:4 8bit 2.0ch audio Without HDR 4...15: Customize,</p> <p>Description: Get EDID DIP status</p>	<p>Command: GET EDID_DIP<CR><LF></p> <p>Return: EDID_DIP 0<CR><LF></p>
2	Set Input EDID	<p>Command: SET EDID in <i>prm</i><CR><LF></p> <p>Return: EDID in <i>prm</i><CR><LF></p> <p>Parameter: <i>in</i> = {in1-in8}; // all means</p>	<p>Command: SET EDID <i>in1</i> 2<CR><LF></p> <p>Return: EDID <i>in1</i> 2<CR><LF></p> <p>Description: Set in1 EDID fix</p>

No.	Description	Command	Example
		all inputs prm = {1 ~ 3} Parameter Description: { 1: 4K@60Hz 4:4:4 8bit 2.0ch audio Without HDR 2: 4K@30Hz 4:4:4 8bit 2.0ch audio Without HDR 3: 1080p@60Hz 4:4:4 8bit 2.0ch audio Without HDR } Description: Set Input EDID	4K@60Hz 4:4:4 8bit 2.0ch audio Without HDR
3	Get All Input EDID status	Command: GET EDID in <CR><LF> Return: EDID in prm<CR> EDID in prm<CR>... EDID in prm<CR><LF> Parameter: in = {in1-in8, all}; prm = {1 ~ 3} Parameter Description: { 1: 4K@60Hz 4:4:4 8bit 2.0ch audio Without HDR 2: 4K@30Hz 4:4:4 8bit 2.0ch audio Without HDR 3: 1080p@60Hz 4:4:4 8bit 2.0ch audio Without HDR } Description: Get all input EDID Status	Command: GET EDID in1<CR><LF> Return: EDID in1 1<CR><LF> Description: Get in1 EDID Status, the result is fix 4K@60Hz 4:4:4 8bit 2.0ch audio Without HDR

No.	Description	Command	Example
System Info			
1	Factory reset	Command: RESET<CR><LF> Return: RESET<CR><LF> Description: Factory reset	Command: RESET<CR><LF> Return: RESET <CR><LF> Description: Factory reset all board
2	System reboot	Command: REBOOT <i>prm</i> <CR><LF> Return: REBOOT <i>prm</i> <CR><LF> Parameter: <i>prm</i> = {all} Description: System reboot	Command: REBOOT <i>all</i> <CR><LF> Return: REBOOT <i>all</i> <CR><LF> Description: System reboot
3	Get IP address	Command: GET IPADDR <CR><LF> Return: XXX.XXX.XXX.XXX<CR><LF> Description: get ipaddr	Command: GET IPADDR <CR><LF> Return: XXX.XXX.XXX.XXX<CR><LF> Description: get ipaddr

No.	Description	Command	Example
4	Get selected target firmware version	<p>Command: GET VER <i>target</i> <CR><LF></p> <p>Return: VER <i>target</i> <i>prm</i><CR><LF></p> <p>Parameter: <i>target</i>={all} <i>prm</i> = {...} // according to actual firmware version</p> <p>Description: Get selected target firmware version</p>	<p>Command: GET VER all <CR><LF></p> <p>Return: VER mainboard 1.2<CR> VER ledboard 1.3<CR> VER card 1.4<CR><LF></p> <p>Description: Get all module firmware version</p>
5	Set the System Code of the remote control	<p>Command: SET IR_SYSCODE <i>prm1</i><CR><LF></p> <p>Return: IR_SYSCODE <i>prm1</i><CR><LF></p> <p>Parameter: <i>prm1</i> = {all, 00,4e}; // all --means support all the system codes of the remote (0x00, 0x4e); 00 -- means only support the system cose is 00 4e -- means only support the system cose is 4e</p> <p>Description: Set IR system code</p>	<p>Command: SET IR_SYSCODE 00<CR><LF></p> <p>Return: IR_SYSCODE 00<CR><LF></p> <p>Description: Set IR system code is 0x00.</p>

No.	Description	Command	Example
6	Get the System Code of the remote control	<p>Command: GET IR_SYSCODE<CR><LF></p> <p>Return: IR_SYSCODE <i>prm1</i><CR><LF></p> <p>Parameter: <i>prm1</i> = {all, 00,4e}; // all --means support all the system codes of the remote (0x00, 0x4e); 00 -- means only support the system cose is 00 4e -- means only support the system cose is 4e</p> <p>Description: Get IR system code</p>	<p>Command: GET IR_SYSCODE <CR><LF></p> <p>Return: IR_SYSCODE 00 <CR><LF></p> <p>Description: IR system code is 0x00.</p>
Preset Scene			
1	Save Preset video matrix	<p>Command: SAVE PRESET <i>prm</i><CR><LF></p> <p>Return: PRESET_V <i>prm</i><CR><LF></p> <p>Parameter: <i>prm</i> = {1~8}//</p> <p>Description: Save Preset video matrix</p>	<p>Command: SAVE PRESET 1<CR><LF></p> <p>Return: PRESET 1 <CR><LF></p> <p>Description:</p>

No.	Description	Command	Example
2	Restore Preset video matrix	<p>Command: RESTORE PRESET <i>prm</i><CR><LF></p> <p>Return: PRESET <i>prm</i><CR><LF></p> <p>Parameter: <i>prm</i> = {1~8}//</p> <p>Description: Restore Preset Scene</p>	<p>Command: RESTORE PRESET 1<CR><LF></p> <p>Return: PRESET 1<CR><LF></p>

