**EVMX42MV**

Serial and IP Control Protocol and Commands

|  |  |
| --- | --- |
| Baud Rate: | 115200 |
| Data Bits:  | 8 |
| Stop Bits: | 1 |
| Parity: | None |
| Default IP Address | 192.168.0.100 |
| TCP/IP Port: | 8000 |
| Telnet Port:  | 23 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Command Code** | **Function Description** | **Example** | **Feedback** | **Default** |
| **System Setting** |
| help! | List all commands | help! |   |   |
| r type! | Get device model | r type! | EVMX42MV |   |
| status! | Get device current status | status! | get the unit all status: |   |
| …… |
| …… |
| r fw version! | Get Firmware version | r fw version! | mcu-main fw version x.xx.xx scaler-1 fw version x.xx.xx scaler-2 fw version x.xx.xx mcu-sub fw version x.xx.xx  |   |
| power z! | Power on/off the device,z=0~1 | power 1! | power on |   |
| (z=0 power off, z=1 power on) | system initializing... mcu-main fw version x.xx.xx scaler-1 fw version x.xx.xx scaler-2 fw version x.xx.xx mcu-sub fw version  |   |
|   | x.xx.xx initialization finished! |   |
| r power! | Get current power state | r power! | power on/power off |   |
| reboot! | Reboot the device | reboot! | Reboot… |   |
| system initializing... mcu-main fw version x.xx.xx scaler-1 fw version x.xx.xx scaler-2 fw version x.xx.xx mcu-sub fw version  |   |
| x.xx.xx initialization finished! |   |
| reset! | Reset to factory defaults | reset! | Reset to factory defaults |   |
| system initializing... mcu-main fw version x.xx.xx scaler-1 fw version x.xx.xx scaler-2 fw version x.xx.xx mcu-sub fw version  |   |
| x.xx.xx initialization finished! |   |
| s beep z! | Enable/disable buzzer function (z=0~1) | s beep 1! | beep on | beep off |
| r beep! | Get buzzer state | r beep! | beep on |   |
| s lock z!  | Lock/unlock front panel button (z=0~1) | s lock 1!  | panel button lock on | panel button lock off |
| r lock! | Get panel button lock state | r lock! | panel button lock on |   |
| **Output Setting** |
| s output y res x! | Set Output y Resolution (y=1~2, x=1~15) y=1. output 1 y=2. output 2 | s output 1 res 3! | output 1 resolution: 3840x2160p60 | 3840x2160p |
| 1.                 4096x2160p60,  | 60 |
| 2.                 4096x2160p50,  |   |
| 3.                 3840x2160p60,  |   |
| 4.                 3840x2160p50, |   |
| 5.                 3840x2160p30, 6. 3840x2160p25, |   |
| 7. 1920x1200p60RB, 8. 1920x1080p60, |   |
| 9. 1920x1080p50,  |   |
| 10.1360x768p60,  |   |
| 11.1280x800p60,  |   |
| 12.1280x720p60, |   |
| 13.1280x720p50,  |   |
| 14. 1024x768p60,  |   |
| 15. AUTO |   |
| r output y res! | Get output y resolution (y=1~2) | r output res! | output 1 resolution: 3840x2160p60 |   |
| 1. output 1 |
| 2. output 2 |
| s output hdcp x! | set output hdcp (y=1~2, x=1~3) y=1. output 1 y=2. output 2 x=1. HDCP 1.4 x=2. HDCP 2.2 x=3. HDCP OFF | s output 1 hdcp 1! | output 1 HDCP: HDCP 1.4 | HDCP 1.4 |
| r output y hdcp! | Get output y hdcp status. (y=1~2) | r output 1 hdcp! | output 1 HDCP: HDCP 1.4 |   |
| 1. output 1 |
| 2. output 2 |
| s output y vka x! | Set output video keep active pattern. (y=1~2, x=1~2) y=1. output 1 y=2. output 2 x=1. black screen x=2. blue screen | s output 1 vka 1! | output 1 VKA pattern:  | black screen |
| black screen |
| r output y vka! | Get output y video keep active pattern. (y=1~2) | r output 1 vka! | output 1 VKA pattern:  |   |
| 1. output 1 | black screen |
| 2. output 2 |   |
| s output y itc x! | Set output video mode (y=1~2, x=1~2) y=1. output 1 y=2. output 2 x=1: video mode x=2: pc mode | s output 1 itc 1! | output 1 ITC: video mode | video mode |
| r output y itc! | Get output video mode (y=1~2) | r output 1 itc! | output 1 ITC: video mode |   |
| 1. output 1 |
| 2. output 2 |
| **EDID Setting** |
| s input edid x! | Set HDMI input EDID mode  | s input edid 1! | input EDID:4K2K 60\_444,  | 4K2K60\_ |
| (x=1~21) | Stereo Audio 2.0 | 444,Stereo  |
| 1. 4K2K60\_444,Stereo Audio 2.0 |   | Audio 2.0 |
| 2. 4K2K60\_444,Dolby/DTS 5.1 |   |   |
| 3. 4K2K60\_444,HD Audio 7.1 |   |   |
| 4. 4K2K30\_444,Stereo Audio 2.0 |   |   |
| 5. 4K2K30\_444,Dolby/DTS 5.1 |   |   |
| 6. 4K2K30\_444,HD Audio 7.1  |   |   |
| 7. 1080P,Stereo Audio 2.0 |   |   |
| 8. 1080P,Dolby/DTS 5.1 |   |   |
| 9. 1080P,HD Audio 7.1  |   |   |
| 10.1920x1200,Stereo Audio 2.0  |   |   |
| 11.1680x1050,Stereo Audio 2.0  |   |   |
| 12.1600x1200,Stereo Audio 2.0  |   |   |
| 13.1440x900,Stereo Audio 2.0  |   |   |
| 14.1360x768, Stereo Audio 2.0 |   |   |
| 15.1280x1024,Stereo Audio 2.0  |   |   |
| 16.1024x768, Stereo Audio 2.0 |   |   |
| 17. 720p,Stereo Audio 2.0  |   |   |
| 18. AUTO  |   |   |
| 19. USER1  |   |   |
| 20. USER2  |   |   |
| 21. USER3 |   |   |
| s input x edid y! | Set select HDMI input EDID mode. (x=1~4) | s input edid 1! | input EDID:4K2K 60\_444,  | 4K2K60\_ |
| 1. HDMI 1  | Stereo Audio 2.0 | 444,Stereo  |
| 2. HDMI 2 |   | Audio 2.0 |
| 3. HDMI 3  |   |   |
| 4. HDMI 4 |   |   |
| (y=1~21) |   |   |
| 1. 4K2K60\_444,Stereo Audio 2.0 |   |   |
| 2. 4K2K60\_444,Dolby/DTS 5.1 |   |   |
| 3. 4K2K60\_444,HD Audio 7.1 |   |   |
| 4. 4K2K30\_444,Stereo Audio 2.0 |   |   |
| 5. 4K2K30\_444,Dolby/DTS 5.1 |   |   |
| 6. 4K2K30\_444,HD Audio 7.1  |   |   |
| 7. 1080P,Stereo Audio 2.0 |   |   |
| 8. 1080P,Dolby/DTS 5.1 |   |   |
| 9. 1080P,HD Audio 7.1  |   |   |
| 10.1920x1200,Stereo Audio 2.0  |   |   |
| 11.1680x1050,Stereo Audio 2.0  |   |   |
| 12.1600x1200,Stereo Audio 2.0  |   |   |
| 13.1440x900,Stereo Audio 2.0  |   |   |
| 14.1360x768, Stereo Audio 2.0 |   |   |
| 15.1280x1024,Stereo Audio 2.0  |   |   |
| 16.1024x768, Stereo Audio 2.0 |   |   |
| 17.720p,Stereo Audio 2.0  |   |   |
| 18.AUTO 19. USER1  |   |   |
| 20. USER2  |   |   |
| 21. USER3 |   |   |
| r input x edid! | Get select input edid mode (x=1~4) | r input 1 edid! | input 1 EDID:4K 2K60\_444,  |   |
| Stereo Audio 2.0 |
| s user x edid  | Set user x edid data | s user x edid  | user 1 edid data: |   |
| 00 ff ff ...! | (x=1~3) | 00 ff ff ...! | 00 ff ff ff ff ff ff 00  |
|   |   |   | ……… |
| r user x edid! | Get user x edid data | r user 1 edid! | user 1 edid data:: |   |
| (x=1~3) | 00 ff ff ff ff ff ff 00 |
|   |  ……… |
| **Audio Setting** |
| s output y audio x! | Set output y audio source | s output 1 audio 0! | output 1 audio follow window 1 video source | output audio:  |
| (y=1~2, x=0~4) y=1. output 1 y=2. output 2 x=0. follow window 1 selected source x=1. HDMI 1 input audio x=2. HDMI 2 input audio x=3. HDMI 3 input audio x=4. HDMI 4 input audio | follow window 1 video source |
| r output y audio! | Get output y audio source (y=1~2) | r output 1 audio! | output 1 audio follow window 1 video source |   |
| 1. output 1 |
| 2. output 2 |
| s output y audio mute x! | Set output audio mute on/off | s output 1 audio mute 0! | output 1 audio mute off | off |
| (x=0~1, y=1~2) y=1. output 1 y=2. output 2 x=0. mute off x=1. mute on |
| r output y audio mute! | Get output y audio mute on/off | r output 1 audio mute! | output 1 audio mute off |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| **Single Screen Mode Setting** |   |
| s output y auto switch x! | Enable/disable auto switch feature (y=1~2, x=0~1) y=1. output 1 y=2. output 2 | s output 1 auto switch 0! | output 1 auto switch off | auto switch off |
| 0. Disable auto switch |
| 1. Enable auto switch |
| r output y auto switch! | Get output y auto switch feature | r output 1 auto switch! | output 1 auto switch off |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| s output y in source x! | Route input source to output y  | s output 1 in source 1! | output 1 in source:  | HDMI 1 |
| (y=1~2, x=1~4) y=1. output 1 y=2. output 2 x=1. HDMI 1 x=2. HDMI 2 x=3. HDMI 3 x=4. HDMI 4 | HDMI 1 |
| r output y in source! | Get output y selected input source (y=1~2) | r output 1 in source! | output 1 in source:  |   |
| 1. output 1 | HDMI 1 |
| 2. output 2 |   |
| **Multi-viewer Mode Setting** |   |   |
| s output y multiview x! | Set output y multi-viewer display  | s output 1 multiview 1! | output 1 multiview:  | single screen |
| mode (y=1~2, x=1~5) | single screen |
| y=1. output 1 y=2. output 2 x=1. single screen x=2. PIP x=3. PBP x=4. triple screen x=5. quad screen |   |
| r output y multiview! | Get output y multi-viewer display mode (y=1~2) | r output 1 multiview! | output 1 multiview:  |   |
| 1. output 1 | single screen |
| 2. output 2 |   |
| s output z window x in y! | Select output z one input for one display window for the current Multiview mode.  | s output 1 window 1 in 1! | output 1: window 1 select  |   |
| (z=1~2) | HDMI 1 |
| 1. output 1 |   |
| 2. output 2 |   |
|  (x=1~4) |   |
| 1. window 1 2. window 2 3. window 3 |   |
| 4. window 4 |   |
|  (y=1~4)  |   |
| 1. HDMI 1 2. HDMI 2 3. HDMI 3 |   |
| 4. HDMI 4 |   |
| r output y window x in! | Get output y windows selected input source (y=1~2) | r output 1 window 1 in! | output 1 window 1 select HDMI 1 |   |
| 1. output 1 |
| 2. output 2 |
|  (x=0~4) |
| 0.                 ALL |
| 1.                 window 1 2. window 2 3. window 3 |
| 4. window 4 |
| s output z window x border y! | Set the border mode of the specified window.  | s output 1 window 1 border 1! | output 1 window 1 border on | off |
| (z=1~2) |
| 1. output 1 |
| 2. output 2 |
|  (x=1~4) |
| 1. window 1 2. window 2 3. window 3 |
| 4. window 4 |
|  (y=0~1)  |
| 0. off |
| 1. on |
| r output y window x border! | Get the border mode of windows | r output 1 window 1 border! | output 1 window 1 border on |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
|  (x=0~4) |
| 0.                 ALL |
| 1.                 window 1 2. window 2 3. window 3 |
| 4. window 4 |
| s output z window x border color y! | Set the border color of the specified window.  | s output 1 window 1 border color 1! | output 1 window 1 border color: | YELLOW |
| (z=1~2) | BLACK |
| 1. output 1 |   |
| 2. output 2 |   |
|  (x=1~4) |   |
| 1. window 1 2. window 2 3. window 3 |   |
| 4. window 4 |   |
|  (y=1~9)  |   |
| 1. BLACK |   |
| 2. RED |   |
| 3. GREEN |   |
| 4. BLUE |   |
| 5. YELLOW |   |
| 6. MEGENTA  |   |
| 7. CYNA |   |
| 8. WHITE |   |
| 9. GRAY |   |
| r output y window x border color! | Get the border color of windows | r output 1 window 1 border color! | output 1 window 1 border color: |   |
| (y=1~2) | BLACK |
| 1. output 1 |   |
| 2. output 2 |   |
|  (x=0~4) |   |
| 0.                ALL |   |
| 1.                window 1 2. window 2 3. window 3 |   |
| 4. window 4 |   |
| s output y pip hstart vstart hsize vsize! | Set PIP window to user define  | s output 1 pip 10 10 20 20! | output 1 PIP 10 10 20 20 |   |
| mode |
| (y=1~2) |
| 1.                output 1 |
| 2.                output 2 hstart=(1~100) vstart=(1~100) hsize=(1~100) vsize=(1~100) |
| NOTE: hstart+hsize<=101, vstart+vsize<=101 |
| s output y pip position x! | Set output y PIP window position | s output 1 pip position 3! | output 1 PIP on right top | PIP on right top |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| (x=1~5) |
| 1. Left Top |
| 2. Left Bottom |
| 3. Right Top |
| 4. Right Bottom |
| 5. user |
| r output y pip position! | Get output y PIP window position | r output 1 pip position! | output 1 PIP on right top |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| s output y pip size x! | Get output y PIP window size | s output 1 pip size 3! | output 1 PIP size large | PIP size:  |
| (y=1~2) | large |
| 1. output 1 |   |
| 2. output 2 |   |
| (x=1~4) |   |
| 1. small |   |
| 2. middle |   |
| 3. large |   |
| 4. user |   |
| r output y pip size! | Get output y PIP window size | r output 1 pip size! | output 1 PIP size large |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| s output y pbp mode x! | Set output y PBP windows display mode (y=1~2) | s output 1 pbp mode 1! | output 1 PBP mode 1 | PBP mode 1 |
| 1. output 1 |
| 2. output 2 |
| (x=1~2) |
| 1. PBP mode 1 |
| 2. PBP mode 2 |
| r output y pbp mode! | Get output y PBP windows display mode (y=1~2) | r output 1 pbp mode! | output 1 PBP mode 1 |   |
| 1. output 1 |
| 2. output 2 |
| s output y pbp aspect x! | Set output y PBP windows display aspect ratio  | s output 1 pbp aspect 1! | output 1 PBP aspect full screen | PBP aspect: full screen |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| (x=1~2) |
| 1. Full screen |
| 2. 16:9 |
| r output y pbp aspect! | Get output y PBP windows  | r output 1 pbp aspect! | output 1 PBP aspect full screen |   |
| display aspect ratio  |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| s output y triple mode x! | Set output y triple windows  | s output 1 triple mode 1! | output 1 triple  | triple mode 1 |
| display mode (y=1~2) | mode 1 |
| 1. output 1 |   |
| 2. output 2 |   |
| (x=1~2) |   |
| 1. triple mode 1 |   |
| 2. triple mode 2 |   |
| r output y triple mode! | Get output y triple windows  | r output 1 triple mode! | output 1 triple  |   |
| display mode (y=1~2) | mode 1 |
| 1. output 1 |   |
| 2. output 2 |   |
| s output y triple aspect x! | Set output y triple windows display aspect ratio  | s output 1 triple aspect 1! | output 1 triple aspect full screen | triple aspect: full screen |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| (x=1~2) |
| 1. Full screen |
| 2. 16:9 |
| r output y triple aspect! | Get output y triple windows display aspect ratio  | r output 1 triple aspect! | output 1 triple aspect full screen |   |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| s output y quad mode x! | Set output y quad windows display mode (y=1~2) | s output 1 quad mode 1! | output1 quad mode 1 | quad mode 1 |
| 1. output 1 |
| 2. output 2 |
| (x=1~2) |
| 1. quad mode 1 |
| 2. quad mode 2 |
| r output y quad mode! | Get output y quad windows display mode (y=1~2) | r output 1 quad mode! | output1 quad mode 1 |   |
| 1. output 1 |
| 2. output 2 |
| s output y quad aspect x! | Set output y quad windows  | s output 1 quad aspect 1! | output 1 quad aspect full screen | quad aspect full screen |
| display aspect ratio |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |
| (x=1~2) |
| 1. Full screen |
| 2. 16:9 |
| r output y quad aspect! | Get output y quad windows  | r output 1 quad aspect! | output 1 quad aspect full screen |   |
| display aspect ratio |
| (y=1~2) |
| 1. output 1 |
| 2. output 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Command Code** | **Function Description** | **Example** | **Feedback** | **Default** |
| **Web Setting** |
| r ipconfig! | Get the Current IP Configuration | r ipconfig! | ip mode: dhcp ip: 192.168.0.100 subnet mask: 255.255.0.0 gateway:192.168.0.1 tcp/ip port:8000 telnet port:23 mac address: 6c:df:fb:0f:c7:38 |   |
| r mac addr! | Get network MAC address | r mac addr! | mac address: 6c: |   |
| df:fb:0f:c7:38 |
| s ip mode z! | Set network IP mode to static IP or DHCP, | s ip mode 1! | ip mode: dhcp |   |
| z=0~1 (z=0 Static, z=1 DHCP ) |
| r ip mode! | Get network IP mode | r ip mode! | ip mode: dhcp |   |
| s ip addr xxx.xxx.xxx.xxx! | Set network IP address | s ip addr  | Set ip address: 192.168.0.100, |   |
| 192.168.0.100! | (please use 's net reboot!' command or repower device to apply new config!) |
| r ip addr! | Get network IP address | r ip addr! | ip address: |   |
| 192.168.0.100 |
| s subnet xxx.xxx.xxx.xxx! | Set network subnet mask | s subnet 255.255.0.0! | Set subnet mask: |   |
| 255.255.0.0, |
| (please use 's net reboot!' command or repower device to apply new config!) |
| r subnet! | Get network subnet mask | r subnet! | subnet mask: 255.255.0.0 |   |
| s gateway xxx.xxx.xxx.xxx! | Set network gateway | s gateway  | Set gateway: |   |
| 192.168.0.1! | 192.168.0.1, |
|   | (please use 's net reboot!' command or repower device to apply new config!) |
| r gateway! | Get network gateway | r gateway! | gateway:192.168.0.1 |   |
| s tcp/ip port x! | Set network TCP/IP port  | s tcp/ip port 8000! | set tcp/ip port:8000 |   |
| (x=1~65535) |
| r tcp/ip port! | Get network TCP/IP port  | r tcp/ip port! | tcp/ip port:8000 |   |
| s telnet port x! | Set network telnet port | s telnet port 23! | telnet port:23 |   |
| (x=1~65535) |
| r telnet port! | Get network telnet port | r telnet port! | telnet port:23 |   |
|   | Reboot network modules | s net reboot! | network reboot ... ip mode: dhcp ip: 192.168.0.100 subnet mask: 255.255.0.0 gateway: 192.168.0.1 tcp/ip port:8000 telnet port:23 mac address: 6c:df:fb:0f:c7:38 |