



Application Programming Interface (API)

Version - 1.12

IPCBBox Commands

Version 1.12

IPCBBox's API use TCP port 24.

1.12	<p>Add command 'config set device exmxmode x {TxID/TxMAC}'.</p> <p>Add command 'config set device stream on/off {TxID/TxMAC or ALL or TxMAC1:TxMAC2:...}'.</p> <p>Add command 'config get date'.</p> <p>Add command 'config set date {year} {month} {day} {hour} {minute} {second}'.</p> <p>Add command 'config get timezone'.</p> <p>Add command 'config set timezone {AAA+B/AAA-B}'.</p> <p>Add command 'config get ntp'.</p> <p>Add command 'config set ntp {ntpserverip1} [ntpserverip2] [ntpserverip3] [ntpserverip4] [ntpserverip5]'.</p> <p>Add command "Remove EDID option 0, support MXNET-10G-TX EDID setting.</p> <p>Remove config set device capture. No longer needed.</p>
1.11	<p>Add a series of mosaic related commands.</p> <p>Add command 'config set device videopath {TxID/TxMAC} {RxID/RxMAC}', 'config set device videopathdisable {RxID/RxMAC}', 'config set device audiopath {TxID/TxMAC} {RxID/RxMAC}', 'config set device audiopathdisable {RxID/RxMAC}'.</p>
1.10	<p>Command 'set device ir', 'set device cec', 'set device rs232', 'set device rs232setting' can support multiple device(separated by colon) or ALL/ALLRX/ALLTX.</p>
1.09	<p>Command 'config set device cec', support send cec to multiple RX's(less than 50, separated by colon), using MAC address or CUSTOM NAME, or ALL RX's.</p> <p>Command 'config set device osd', support set osd to multiple RX's(less than 50, separated by colon), using MAC address or CUSTOM NAME, or ALL RX's.</p>
1.08	Add command 'vwid layout combine' and 'vwid layout split'.
1.07	Update API document.
1.06	<p>Add kvm command. Use for kvm roaming.</p> <p>Add command 'config set device hpdirst {device_id or device_mac}'</p>
1.05	<p>Add copy command in vwid. support to set bezel gap in vwid.</p> <p>Add 'config set device kvmroaming</p>

	RX1ID,X1,Y1:RX2ID,X2,Y2[:RX3ID,X3,Y3...] RX7ID'.
1.02	Add vwid command.
1.01	Update 'matrix aset' and 'matrix add' command description.

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IPC System Commands

Use for system setting.

config get name

Function

Get IPC's name.

Example

config get name

```
{"gid":200000,"cmd":"config get name","info":"AC-MXIP-CBOX","code":0}
```

config get version

Function

Get version.

Example

config get version

```
{"cmd":"config get version","info":"1.10","code":0}
```

config get ipsetting

Function

Get LAN1's IP info. This IP setting is for AV/IP port, not for PC Control port. Example will be autoip or dhcp or static/192.168.99.1/255.255.255.0/192.168.99.254.

Example

config get ipsetting

```
{"cmd":"config get ipsetting","info":"autoip","code":0}
```

config get ipsetting2

Function

Get LAN2's IP info. This IP setting is for PC Control port, not for AV/IP port. Example will be autoip or dhcp or static/192.168.1.239/255.255.255.0/192.168.1.1.

Example

config get ipsetting2


```
"{"cmd":"config get ipsetting2","info":"static/192.168.1.239/255.255.255.0","code":0}"
```

config get devicelist

Function

Get device list.

Example

config get devicelist

```
"{"cmd":"config get devicelist","info":{"188A6ACE87DC":{"ch":"0009","id":"188A6ACE87DC","ipmode":"autoip","rs232mode":"2","online":14147,"version":"3.13","state":"s_srv_on","mac":"188A6ACE87DC","is_host":1,"dtype":"ast152x","edid":"2","ip":"169.254.10.190"},"188A6A45C4A5":{"version":"3.13","id":"188A6A45C4A5","mac":"188A6A45C4A5","ch_p":"0000","dtype":"ast152x","ch_u":"0001","ch_v":"0002","ch":"0000","ch_a":"0002","ipmode":"autoip","rs232mode":"2","ch_r":"0001","ch_c":"0000","ch_s":"0002","online":14147,"state":"s_srv_on","ip":"169.254.8.59"},"188A6A0F4485":{"ch":"0002","id":"188A6A0F4485","ipmode":"autoip","rs232mode":"2","online":14147,"version":"3.11","state":"s_attaching","mac":"188A6A0F4485","is_host":1,"dtype":"ast152x","edid":"2","ip":"169.254.4.246"},"188A6A1887E3":{"version":"3.12","id":"188A6A1887E3","mac":"188A6A1887E3","ch_p":"0000","dtype":"ast152x","ch_u":"0001","ch_v":"0009","ch":"0000","vmode":"0","ch_a":"0009","ipmode":"autoip","rs232mode":"2","ch_r":"0001","ch_c":"0000","ch_s":"0001","online":14147,"state":"s_srv_on","ip":"169.254.7.251"}},"code":0}"
```

config get rs-232 alias

Function

Get rs-232 status. Example will be on or off.

Example

config get rs-232 alias

```
"{"cmd":"config get rs-232 alias","info":"on","code":0}"
```

config get dns

Function

Get dns.

Example

config get dns

```
"{"cmd":"config get dns","info":"8.8.8.8 8.8.4.4","code":0}"
```

config get date

Function

Get system date.

Example

config get date

```
{"cmd":"config get date","info":"2021-12-15 04:31:32","code":0}
```

config get timezone

Function

Get system timezone.

Example

config get timezone

```
{"cmd":"config get timezone","info":"UTC+0","code":0}
```

config get ntp

Function

Get system ntp.

Example

config get ntp

```
{"cmd":"config get ntp","info":"time.windows.com","code":0}
```

config set ip4addr

{autoip/dhcp/static:169.254.99.100:255.255.0.0}

Function

Set AV ENTWORK's IP. This IP setting is for AV/IP port, not for PC Control port.

Example

config set ip4addr autoip

```
{"code":0,"cmd":"config set ip4addr autoip"}
```

config set ip4addr2

{autoip/dhcp/static:192.168.1.239:255.255.255.0:192.168.1.1}

Function

Set PC CTL NETWORK's IP. This IP setting is for PC Control port, not for AV/IP port.

Example

```
config set ip4addr2 static:192.168.1.239:255.255.255.0
```

```
"{"code":0,"cmd":"config set ip4addr2 static:192.168.1.239:255.255.255.0"}"
```

config set webloginpasswd {username:password}

Function

Set web login password.

Example

```
config set webloginpasswd admin:admin
```

```
"{"code":0,"cmd":"config set webloginpasswd admin:admin"}"
```

config set restorefactory

Function

Set AC-MXNET-CBOX restore factory.

Example

```
config set restorefactory
```

```
"OK"
```

config set reboot

Function

Reboot AC-MXNET-CBOX.

Example

```
config set reboot
```

```
"{"code":0,"cmd":"config set reboot"}"
```

config set rs-232 alias on/off

Function

Set rs-232 on or off.

Example

config set rs-232 alias on

```
{"code":0,"cmd":"config set rs-232 alias on"}
```

config set dns {nameserverip1} [nameserverip2]

Function

Set DNS.

Example

config set dns 8.8.8.8 8.8.4.4

```
{"code":0,"cmd":"config set dns 8.8.8.8 8.8.4.4"}
```

OR

config set dns 8.8.8.8

```
{"code":0,"cmd":"config set dns 8.8.8.8"}
```

config set microusbmode {modeType}

Function

Note: Only for AC-MXNET-SW1-ASM. Switch microUSB port between IPCBox and the Switch. modeType = [1,2], 1:IPCBox, 2:Switch.

Example

config set microusbmode 1

```
{"cmd":"config set microusbmode 1","info":"OK","code":0}
```

config set date {year} {month} {day} {hour} {minute} {second}

Function

Set date.

Example

```
config set date 2021 12 15 8 12 9
```

```
"{"code":0,"cmd":"config set date 2021 12 15 8 12 9"}"
```

config set timezone {AAA+B/AAA-B}

Function

Set timezone.

AAA is a string, such as UTC. The range of **B** is 0 to 12.

Example

```
config set timezone UTC-3
```

```
"{"code":0,"cmd":"config set timezone UTC-3"}"
```

Or

```
config set timezone UTC+2
```

```
"{"code":0,"cmd":"config set timezone UTC+2"}"
```

config set ntp {ntpserverip1} [ntpserverip2] [ntpserverip3] [ntpserverip4] [ntpserverip5]

Function

Set ntp server.

ntpserverip1 ntpserverip2 ntpserverip3 ntpserverip4 ntpserverip5 are the ntp server address, up to 5 addresses can be set, separated by spaces.

Example

```
config set ntp 0.north-america.pool.ntp.org 1.north-america.pool.ntp.org 2.north-america.pool.ntp.org
```

```
3.north-america.pool.ntp.org
```

```
"{"code":0,"cmd":"config set ntp 0.north-america.pool.ntp.org 1.north-america.pool.ntp.org 2.north-america.pool.ntp.org
```

```
3.north-america.pool.ntp.org"}"
```

IPC Device Commands

Use for encoder or decoder setting.

config get device status {device_id/device_mac}

Function

Get device status. Get all device status, use command: config get device status ALL.

Example

config get device status 188A6ACE87DC

```
{"cmd":"config get device status
188A6ACE87DC","info":{"188A6ACE87DC":{"version":"3.13","colordepth":"8Bit","speed":"3","hdc":"HDCP1","audio":"PCM","
ch":"0009","status":0,"hpd":"HPD1","profile":0,"online":17339,"dtype":"ast152x","hdr":"HDR0","light":0,"is_host":1,"edid":"2","ip
":"169.254.10.190","video":"3840X2160p/30Hz","id":"188A6ACE87DC"},"code":0}}
```

config get device info {device_id/device_mac}

Function

Get device info. If RX info has not video, for 1G device, its default timing will be 3840x2160 30, and for 10G device, its default timing will be 3840x2160 60.

Example

TX:

config get device info 188A6ACE87DC

```
{"cmd":"config get device info
188A6ACE87DC","info":{"ch":"0009","id":"188A6ACE87DC","ipmode":"autoip","rs232mode":"2","online":17409,"version":"3.13
","state":"s_srv_on","mac":"188A6ACE87DC","is_host":1,"dtype":"ast152x","edid":"2","ip":"169.254.10.190"},"code":0}}
```

RX:

config get device info 188A6A45C4A5

```
{"cmd":"config get device info
188A6A45C4A5","info":{"version":"3.13","id":"188A6A45C4A5","mac":"188A6A45C4A5","ch_p":"0000","dtype":"ast152x","ch_
u":"0001","ch_v":"0002","ch":"0000","ch_a":"0002","ipmode":"autoip","rs232mode":"2","ch_r":"0001","ch_c":"0000","ch_s":"00
02","online":17569,"state":"s_srv_on","video":{"frames_per_second":"30","height":"2160","width":"3840"},"ip":"169.254.8.59"},
"code":0}}
```

config set device reboot {device_id/device_mac}

Function

Reboot device.

Example

config set device reboot 188A6ACE87DC

```
{"cmd":"config set device reboot 188A6ACE87DC","info":"","code":0}}
```

config set device restorefactory

{device_id/device_mac}

Function

Set device{device_id} restore factory.

Example

config set device restorefactory 188A6ACE87DC

```
{"cmd":"config set device restorefactory 188A6ACE87DC","info":"Reset to factory default...\nCurrent CRC is incorrect!!! Clear All.\ndone\n","code":0}"
```

config set device id {new_id} {device_id/device_mac}

Function

Set device id to new_id (alias name). **Note: id can not contain a colon ':' or a ',', can not be named ALL/ALLRX/ALLTX.**

Example

config set device id TX66 188A6ACE87DC

```
{"code":0,"cmd":"config set device id TX66 188A6ACE87DC"}
```

config set device ip

{autoip/dhcp/static:192.168.100.1:255.255.255.0:192.168.100.254} {device_id/device_mac}

Function

Set device ip.

Example

config set device ip autoip 188A6ACE87DC

```
{"cmd":"config set device ip autoip 188A6ACE87DC","info":"","code":0}"
```

config set device rm {device_id/device_mac}

Function

Remove device from device list.

Example

config set device rm 188A6ACE87DC

```
{"code":0,"cmd":"config set device rm 188A6ACE87DC"}
```

config set device audio input type hdmi/analog/auto/auto_1/auto_2

Function

Set device audio type. Note: host only.

Example

config set device audio input type hdmi 188A6ACE87DC

```
{"cmd":"config set device audio input type hdmi 188A6ACE87DC","info":"","code":0}
```

config set device audio volume {value} {device_id/device_mac}

Function

Set device audio volume. Note: client only.

Example

config set device audio volume 6 188A6ACE87DC

```
{"cmd":"config set device audio volume 6 188A6ACE87DC","info":"","code":0}
```

config set device multicast on/off {device_id/device_mac}

Function

Set device multicast on or off.

Example

config set device multicast on 188A6ACE87DC

```
{"cmd":"config set device multicast on 188A6ACE87DC","info":"","code":0}
```


config set device channel {ch_select} {device_id/device_mac}

Function

Set device channel. Only for device AC-MXNET-1G-T. Note: {ch_select}'s scope is 0000 to 9999.

Example

config set device channel 1006 188A6ACE87DC

```
"{"code":0,"cmd":"config set device channel 1006 188A6ACE87DC"}"
```

config set device description {description_may_include_space} {device_id/device_mac}

Function

Set device description.

Example

config set device description LEFT SCREEN OF CORNER 188A6ACE87DC

```
"{"code":0,"cmd":"config set device description LEFT SCREEN OF CORNER 188A6ACE87DC"}"
```

config set device video {width height fps} {device_id/device_mac}

Function

Set RX device's timing. when 1G set pass-through, we need send: config set device video 0 0 0 {device_id/device_mac}.

All decoder support:

pass-through 0x0 0: only AC-MXNET-1G device support.

1280X720 50

1280X720 60

1920X1080 24

1920X1080 50

1920X1080 60

3840X2160 30

3840X2160 60

Example

config set device video 1920 1080 60 188A6A45C4A5

```
"{"code":0,"cmd":"config set device video 1920 1080 60 188A6A45C4A5"}"
```

config set device edid {edidIndex} {device_id/device_mac}

Function

Set encoder device's EDID.

For AC-MXNET-1G-TX:

When using AC-MXNET-1G-TX device, its serial port's modeType need set to 2.

{edidIndex} = [1-15]

- 1: 1080P_6CH,
- 2: 1080P_3D_2CH,
- 3: 1080P_3D_6CH,
- 4: 4K30Hz_3D_2CH.
- 5: 4K30Hz_3D_6CH,
- 6: 4K30Hz_3D_8CH,
- 7: 1080P_2CH_HDR,
- 8: 1080P_6CH_HDR,
- 9: 1080P_3D_2CH_HDR,
- 10: 1080P_3D_6CH_HDR,
- 11: 4K30Hz_3D_2CH_HDR.
- 12: 4K30Hz_3D_6CH_HDR,
- 13: 4K30Hz_3D_8CH_HDR,
- 14: 1920X1200_2D_2CH_HDR.
- 15: User_EDID

For AC-MXNET-10G-TX:

{edidIndex} = [1-17]

- 1: 1080P_6CH,
- 2: 1080P_3D_2CH,
- 3: 1080P_3D_6CH,
- 4: 4K30Hz_3D_2CH.
- 5: 4K30Hz_3D_6CH,
- 6: 4K30Hz_3D_8CH,
- 7: 1080P_2CH_HDR,
- 8: 1080P_6CH_HDR,
- 9: 1080P_3D_2CH_HDR,
- 10: 1080P_3D_6CH_HDR,
- 11: 4K30Hz_3D_2CH_HDR.
- 12: 4K30Hz_3D_6CH_HDR,
- 13: 4K30Hz_3D_8CH_HDR,

14: 1920X1200_2D_2CH_HDR.

15: 4K60Hz_3D_2CH_HDR.

16: 4K60Hz_3D_6CH_HDR,

17: 4K60Hz_3D_8CH_HDR

Example

```
config set device edid 3 188A6ACE87DC
```

```
{"cmd":"config set device edid 3 188A6ACE87DC","info":"Set EDID success","code":0}"
```

config set device cec {hexData} {device_id/device_mac}

Function

Send CEC data to device. if hexData=poweron/poweroff, IPC will send all poweron/poweroff cec to the device.

{hexData} is 0036 or 0004 or other hex data. Support send cec to multiple device(less than 50, **separated by colon**), using

MAC address or CUSTOM NAME, or ALLRX, ALLTX, ALL.

Example

```
config set device cec poweron 188A6A45C4A5
```

```
{"cmd":"config set device cec poweron 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device cec poweroff 188A6A45C4A5
```

```
{"cmd":"config set device cec poweroff 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device cec 0036 188A6A45C4A5
```

```
{"cmd":"config set device cec 0036 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device cec poweron 188A6A45C4A5:188A6A45C4A7
```

```
{"cmd":"config set device cec poweron 188A6A45C4A5:188A6A45C4A7","info":"OK","code":0}"
```

or:

```
config set device cec poweron ALLRX
```

```
{"cmd":"config set device cec poweron ALLRX","info":"OK","code":0}"
```

config set device rs232mode {modeType} {device_id/device_mac}

Function

Set device's RS232 mode type.

Only supports AC-MXNET-1G device.

After switching the mode, the device will automatically restart.

Note: In mode 1, we can not control device light or RX's hdr , TX's edid, some status of video and audio on diagnostics page, also can not modify Custom Name on device LCD screen.

And can not upgrade MCU by IPCBOX's WebGUI.

{modeType} = [1,2].

1: rs232 transparent transmission mode, data is transmitted from TX(RX) to RX(TX).

2: rs232 guest mode, data is transmitted from IPCBox to RX or TX.

Example

```
config set device rs232mode 2 188A6A45C4A5
```

```
{"cmd":"config set device rs232mode 2 188A6A45C4A5","info":"Config success, 188A6A45C4A5 will reboot","code":0}"
```

config set device rs232setting {xx yy zz aa bb} {device_id/device_mac}

Function

Set device's RS232 setting. Currently only supports AC-MXNET-1G device. Support send rs232 setting data to multiple device(less than 50, separated by colon), using MAC address or CUSTOM NAME, or ALLRX, ALLTX, ALL. Only supports AC-MXNET-1G device.

When using 1G device, its serial port's modeType need set to 2.

xx is baudrate = 300 ~ 115200

yy is data bits = 7 or 8

zz is parity = 0: None, 1: Even, 2: Odd

aa is stop bits = 1

bb is flow-control = 0: None

Example

```
config set device rs232setting 9600 8 0 1 0 188A6A45C4A5
```

```
{"cmd":"config set device rs232setting 9600 8 0 1 0 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device rs232setting 9600 8 0 1 0 188A6A45C4A5:188A6A45C4A6
```

```
{"cmd":"config set device rs232setting 9600 8 0 1 0 188A6A45C4A5:188A6A45C4A6","info":"OK","code":0}"
```

or:

```
config set device rs232setting 9600 8 0 1 0 ALLTX
```

```
{"cmd":"config set device rs232setting 9600 8 0 1 0 ALLTX","info":"OK","code":0}"
```

config set device rs232 dataType {serial port data} {device_id/device_mac}

Function

Send data to device's serial port. When using 1G device, its serial port's modeType need set to 2.

dataType = [1,2], 1:ASCII, 2:HEX.

{serial port data} can be terminator with \r or \n or \r\n, but need add double '\'. Can contain spaces.

Support send rs232 data to multiple device(less than 50, **separated by colon**), using MAC address or CUSTOM NAME, or ALLRX, ALLTX, ALL.

Example

```
config set device rs232 1 SerialDATA \r 188A6A45C4A5
```

```
{"cmd":"config set device rs232 1 SerialDATA \r 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device rs232 2 2F 36 F8 188A6A45C4A5
```

```
{"cmd":"config set device rs232 2 2F 36 F8 188A6A45C4A5","info":"OK","code":0}"
```

or:

```
config set device rs232 2 2F 36 F8 188A6A45C4A5:188A6A45C4A6
```

```
{"cmd":"config set device rs232 2 2F 36 F8 188A6A45C4A5:188A6A45C4A6","info":"OK","code":0}"
```

or:

```
config set device rs232 2 2F 36 F8 ALLRX
```

```
{"cmd":"config set device rs232 2 2F 36 F8 ALLRX","info":"OK","code":0}"
```

config set device light on {device_id/device_mac}

Function

Set device's light on. When using 1G device, its serial port's modeType need set to 2.

Example

```
config set device light on 188A6A45C4A5
```

```
{"cmd":"config set device light on 188A6A45C4A5","info":"OK","code":0}"
```

config set device light off {device_id/device_mac}

Function

Set device's light off. When using 1G device, its serial port's modeType need set to 2.

Example

```
config set device light off 188A6A45C4A5
```

```
{"cmd":"config set device light off 188A6A45C4A5","info":"OK","code":0}"
```

config set device light flash {device_id/device_mac}

Function

Set device's light flash. When using 1G device, its serial port's modeType need set to 2.

Example

config set device light flash 188A6A45C4A5

```
{"cmd":"config set device light flash 188A6A45C4A5","info":"OK","code":0}"
```

config set device capture {device_id/device_mac}

Function

No longer needed, just need to get a new capture in this address. Such as:

http://IPBox's IP:81/capture.bmp?dev=encoder_device_mac

config set device osd on/off {device_id/device_mac}

Function

Set decoder osd on or off. Support set osd to multiple RX's(less than 50, **separated by colon**), using MAC address or CUSTOM NAME, or ALL RX's. If set to all device, we need send: config set device osd on ALL or config set device osd off ALL.

Example

config set device osd on 188A6A45C4A5

```
{"cmd":"config set device osd on 188A6A45C4A5","info":"OK","code":0}"
```

or:

config set device osd on 188A6A45C4A5:188A6A45C4A7

```
{"cmd":"config set device osd on 188A6A45C4A5:188A6A45C4A7","info":"OK","code":0}"
```

or:

config set device osd on ALL

```
{"cmd":"config set device osd on ALL","info":"OK","code":0}"
```

or:

config set device osd off 188A6A45C4A5

```
{"cmd":"config set device osd off 188A6A45C4A5","info":"OK","code":0}"
```

config get device status {device_id/device_mac}

Function

Get device diagnostics status. If we need to get all device status, we can send: config get device status ALL.

Example

config get device status 188A6A45C4A5

```
{"cmd":"config get device status
188A6A45C4A5","info":{"188A6A45C4A5":{"version":"3.13","id":"188A6A45C4A5","accessonu":"n","speed":"3","accessonc":"
n","hdcpc":"HDCP1","dtype":"ast152X","accessona":"y","accessonr":"n","colordepth":"8Bit","ch":"0002","accessonv":"y","status":
0,"hpd":"HPD1","ip":"169.254.8.59","audio":"NON
PCM","online":21449,"hdr":"HDR0","light":1,"connectedname":"MXX-O-3-H","accessons":"y","profile":0,"video":"
1920X1080p/59Hz","accessonp":"n"},"code":0}}
```

config set device hdrmode XX {rx_device_id/rx_device_mac}

Function

Set decoder HDR on/off. [XX=0-1] (0=Disable, 1=Enable)

Example

config set device hdrmode 1 188A6A45C4A5

```
{"code":0,"cmd":"config set device hdrmode 1 188A6A45C4A5"}
```

config set device copyedid {RxID} {TxID }

Function

Copy edid from decoder. Only supports AC-MXNET-1G device.

Example

config set device copyedid 188A6A45C4A5 188A6A0F4485

```
{"cmd":"config set device copyedid 188A6A45C4A5 188A6A0F4485","info":"Copy success","code":0}
```

config set device copyloopedid {TxID/TxMAC}

Function

Copy edid from loop. Only supports AC-MXNET-1G device.

Example

config set device copyloopedid 188A6A0F4485

```
{"cmd":"config set device copyloopedid 188A6A0F4485","info":"Copy success","code":0}"
```

config set device profile XX {TxID/TxMAC}

Function

Set encoder bandwidth. [XX=0,5] (0=auto, 5=200M). Only supports AC-MXNET-1G device.

Example

```
config set device profile 0 188A6A0F4485
```

```
{"cmd":"config set device profile 0 188A6A0F4485","info":"188A6A0F4485 will reboot","code":0}"
```

config set device stretch XX {RxID/RxMAC}

Function

Set decoder stretch. [XX=1-2], 1=stretch out, 2=fit in. Only supports AC-MXNET-1G device.

Example

```
config set device stretch 2 188A6A45C4A5
```

```
{"code":0,"cmd":"config set device stretch 2 188A6A45C4A5"}
```

config set device rotate XX {RxID/RxMAC}

Function

Set decoder rotate. [XX=0,3,6 or 0,180,270], 0=rotate 0, 3=rotate 180, 6=rotate 270. Only supports AC-MXNET-1G device.

Example

```
config set device rotate 3 188A6A45C4A5
```

```
{"code":0,"cmd":"config set device rotate 3 188A6A45C4A5"}
```

config set device hdcp XX {RxID/RxMAC}

Function

Set decoder hdcp. [XX=0-4][0=Auto, 1=Bypass, 3=HDCP1.4, 4=HDCP2.2]. Only supports AC-MXNET-1G device.

Example

```
config set device hdcp 1 188A6A45C4A5
```

```
{"cmd":"config set device hdcp 1 188A6A45C4A5","info":"Set HDCP success","code":0}"
```


config set device videopath {TxID/TxMAC} {RxID/RxMAC}

Function

Set decoder videopath.

Example

config set device videopath 188A6A0F4485 188A6A45C4A5

```
"{"code":0,"cmd":"config set device videopath 188A6A0F4485 188A6A45C4A5"}"
```

config set device videopathdisable {RxID/RxMAC}

Function

Disable decoder videopath.

Example

config set device videopathdisable 188A6A45C4A5

```
"{"code":0,"cmd":"config set device videopathdisable 188A6A45C4A5"}"
```

config set device audiopath {TxID/TxMAC} {RxID/RxMAC}

Function

Set decoder audiopath.

Example

config set device audiopath 188A6A0F4485 188A6A45C4A5

```
"{"code":0,"cmd":"config set device audiopath 188A6A0F4485 188A6A45C4A5"}"
```

config set device audiopathdisable {RxID/RxMAC}

Function

Disable decoder audiopath.

Example

config set device audiopathdisable 188A6A45C4A5

```
"{"code":0,"cmd":"config set device audiopathdisable 188A6A45C4A5"}"
```

config set device rs232path {TxID/TxMAC} {RxID/RxMAC}

Function

Set decoder rs232path.

Example

config set device rs232path 188A6A0F4485 188A6A45C4A5

```
"{"code":0,"cmd":"config set device rs232path 188A6A0F4485 188A6A45C4A5"}"
```

config set device rs232pathdisable {RxID/RxMAC}

Function

Disable decoder rs232path.

Example

config set device rs232pathdisable 188A6A45C4A5

```
"{"code":0,"cmd":"config set device rs232pathdisable 188A6A45C4A5"}"
```

config set device irpath {TxID/TxMAC} {RxID/RxMAC}

Function

Set decoder irpath.

Example

config set device irpath 188A6A0F4485 188A6A45C4A5

```
"{"code":0,"cmd":"config set device irpath 188A6A0F4485 188A6A45C4A5"}"
```

config set device irpathdisable {RxID/RxMAC}

Function

Disable decoder irpath.

Example

config set device irpathdisable 188A6A45C4A5

```
"{"code":0,"cmd":"config set device irpathdisable 188A6A45C4A5"}"
```



```
reboot","code":0}""
```

config set device hpdrrst {device_id or device_mac}

Function

Reset hotplug of encoder or decoder.

Example

```
config set device hpdrrst 188A6A45C4A5
```

```
"{"code":0,"cmd":"config set device hpdrrst 188A6A45C4A5"}"
```

config set device exmxmode x {TxID/TxMAC}

Function

Change the current downmix preset for the AC-MXNET-1G-AVDM-E (Balanced Audio Output Only).

x: (x=[0-7])

[0-Matrix Mode Close][1-STD FX,Default Mode],[2-Low Center+]

[3-Mid Center+],[4-High Center+],[5-Middle FX (Recommended)],[6-Full FX],[7-Voice FX]

Note: AC-MXNET-1G-AVDM-E version needs to be greater than or equal to 3.22 to support this function.

Support send command to multiple device(less than 50, **separated by colon**), using MAC address or CUSTOM NAME, or ALLTX.

Example

```
config set device exmxmode 0 188A6A45C4A5
```

```
"{"code":0,"cmd":"config set device exmxmode 0 188A6A45C4A5"}"
```

```
config set device exmxmode 6 188A6A45C4A5
```

```
"{"code":0,"cmd":"config set device exmxmode 6 188A6A45C4A5"}"
```

config set device stream on/off {TxID/TxMAC or ALL or TxMAC1:TxMAC2:...}

Function

Set stream on/off on Tx.

Support send it to multiple device(less than 50, separated by colon), using MAC address or CUSTOM NAME, or ALL.

Example

```
config set device stream on 188A6A45C4A5
```

```
"{"code":0,"cmd":"config set device stream on 188A6A45C4A5"}"
```

```
config set device stream off 188A6A45C4A5
```

```
{"code":0,"cmd":"config set device stream off 188A6A45C4A5"}
```

IPC Video Wall Commands

Note: deprecation, recommend to use command **vwid**.

Use for video wall setting.

vw list

Function

Get video wall list.

Example

```
vw list
```

```
{"cmd":"vw
```

```
list","info":{"vw1":{"cols":3,"rows":3,"osd":true,"hosts":["tx1"],"bezelgap":[1345,1350,645,650],"rotate":[],"clients":["rx1"]}},"code":0}
```

vw get {vw_name}

Function

Get video wall {vw_name}.

Example

```
vw get vw1
```

```
{"cmd":"vw get
```

```
vw1","info":{"cols":3,"rows":3,"osd":true,"hosts":["tx1"],"bezelgap":[1345,1350,645,650],"rotate":[],"clients":["rx1"]},"code":0}
```

vw add {vw_name} {rows} {cols}

Function

Add video wall, total rows is {rows}, total columns is {cols}.

Example

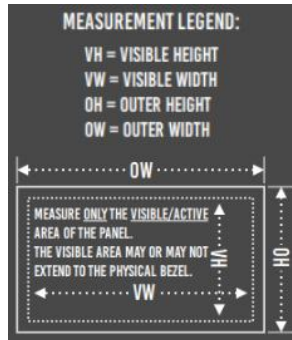
```
vw add vw1 3 3
```

```
{"code":0,"cmd":"vw add vw1 3 3"}
```

vw gap {vw_name} {vw} {ow} {vh} {oh}

Function

Set video wall bezel gap.



Example

vw gap vw1 1345 1350 645 650

```
{"code":0,"cmd":"vw gap vw1 1345 1350 645 650"}
```

vw tx {vw_name} {tx1} ..

Function

Set video wall tx1.

Example

vw tx vw1 tx1

```
{"code":0,"cmd":"vw tx vw1 tx1"}
```

vw rx {vw_name} {rx1[:row:col[:rotate]]} ..

Function

Set video wall {rx1} at row, col..

row>=1, col>=1, If the position row, col exist RX, new RX will replace old RX, and the old RX will be removed and displays an entire picture of TX. For 1G device, rotate =0 or 180, for 10G device rotate only equal 0.

Example

vw rx vw1 rx1

```
{"code":0,"cmd":"vw rx vw1 rx1"}
```

vw osd {vw_name} {on/off}

Function

Enable or disable osd.

Example

vw osd vw1 on

```
{"code":0,"cmd":"vw osd vw1 on"}
```

vw rmtx {vw_name} {tx1} [tx2] ..

Function

Delete video wall tx1.

Example

vw rmtx vw1 tx1

```
{"code":0,"cmd":"vw rmtx vw1 tx1"}
```

vw rmrx {vw_name} {rx1} [rx2 rx3...]

Function

Delete video wall rx1, rx2, rx3....

Example

vw rmrx vw1 rx1

```
{"code":0,"cmd":"vw rmrx vw1 rx1"}
```

vw rm {vw_name}

Function

Delete video wall {vw_name}.

Example

vw rm vw1

```
{"cmd":"vw rm vw1","info":"OK","code":0}
```

vw active {vw_name} [force]

Function

Active video wall {vw_name}.

Example

vw active vw1

```
{"cmd":"vw active vw1","info":"OK","code":0}
```

IPC Matrix Commands

Use for matrix setting.

matrix list

Function

Get matrix list.

Example

matrix list

```
{"cmd":"matrix list","info":{"mx1":{"type":"va","srcs":{"rx1":"tx1","rx2":"tx1"}}},"code":0}
```

matrix get {name}

Function

Get matrix {name}'s info.

Example

matrix get mx1

```
{"cmd":"matrix get mx1","info":{"type":"va","srcs":{"rx1":"tx1","rx2":"tx1"}},"code":0}
```

matrix add {name} {video/audio/usb/infrared/serial/all}

Function

Add new matrix {name}. parameters video is equal to v. (**video="v", usb="u", audio="a", infrared="r", serial="s", all="z", [""]="v"**). So, if we want to add a matrix named mx1, connect TX1's **video** and **audio** to RX1, we can use parameters **av**.
matrix add mx1 av matrix set mx1 TX1 RX1.

Example

matrix add mx1 va


```
{"code":0,"cmd":"matrix add mx1 va"}
```

matrix set {name} {tx1 rx1 rx2 .. rxn[, tx2 rx..]}

Function

Add tx1 points to rx1 and rx2, and more [tx2 point to rx...].

Example

```
matrix set mx1 tx1 rx1 rx2
```

```
{"cmd":"matrix set mx1 tx1 rx1 rx2","info":"OK","code":0}
```

matrix aset

[[name]:[video/audio/usb/infrared/serial/all]] {tx1 rx1 rx2 .. rxn[, tx2 rx..]}

Function

parameters video is equal to v. (**video**="v", **usb**="u", **audio**="a", **infrared**="r", **serial**="s", **all**="z", **[""]**="v"). So, if we want to connect TX1's **video** and **audio** to RX1, we can use parameters **av**. matrix aset :av TX1 RX1 RX2 .. RXn. Reset tx1 point to rx1 and rx2, or reset the devices in the matrix[name]. The parameters in [] is **not necessary**. The default type is **video**. Effective immediately.

e.g.: set infrared from TX1 to RX1, RX3, ... RXn matrix aset :infrared TX1 RX1 RX2 .. RXn e.g.: set usb from TX1 to RX1, RX3, ... RXn matrix aset :usb TX1 RX1 RX2 .. RXn

Example

```
matrix aset tx1 rx1 rx2
```

```
{"cmd":"matrix aset tx1 rx1 rx2","info":"OK","code":0}
```

matrix rm {name}

Function

Delete matrix{name}.

Example

```
matrix rm mx1
```

```
{"cmd":"matrix rm mx1","info":"OK","code":0}
```

matrix active {name} [force]

Function

Active matrix {name}, if add [force], IPC will force refresh all the devices of matrix {name}.

Example

matrix active mx1

```
{"cmd":"matrix active mx1","info":"OK","code":0}
```

IPC Scene Commands

Note: deprecation, recommend to use command **vwid.**

Use for scene setting.

scene list

Function

Get scene list.

Example

scene list

```
{"cmd":"scene list","info":{"scene1":{"matrix":["mx1"],"vwall":["vw1"]}}, "code":0}
```

scene get {name}

Function

Get scene {name}'s info.

Example

scene get scene1

```
{"cmd":"scene get scene1","info":{"matrix":["mx1"],"vwall":["vw1"]}, "code":0}
```

scene set vw {name} {vw1 ...}

Function

Put {vw1} of video wall into {name} of scene..

Example

scene set vw scene1 vw1

```
{"cmd":"scene set vw scene1 vw1","info":"OK","code":0}
```

scene set matrix {name} {mtx1 ...}

Function

Put {mtx1} of matrix into scene {name}..

Example

scene set matrix scene1 mx1

```
{"cmd":"scene set matrix scene1 mx1","info":"OK","code":0}
```

scene rm {name}

Function

Delete scene {name}.

Example

scene rm scene1

```
{"cmd":"scene rm scene1","info":"OK","code":0}
```

scene active {name} [force]

Function

Active scene {name}, if add [force], IPC will force refresh all the devices of scene{name}.

Example

scene active scene1

```
{"cmd":"scene active scene1","info":"OK","code":0}
```

IPC vwid Commands

Use for videowall and layout setting.

vwid list

Function

Get vwid list

Example

vwid list

```
{ "cmd": "vwid
list", "info": { "vw2": { "cols": 3, "rows": 3, "layouts": { "s2": { "cols": 3, "rows": 3, "layout": [ "1:1::2:2:1:1:0:2:1:1:1:1", "1:2::2:2:1:2:0:2:1:1:1:1", "1:3::1:1:1:1:0:2:1:1:1:1", "2:1::2:2:2:1:0:2:1:1:1:1", "2:2::2:2:2:2:0:2:1:1:1:1", "2:3::1:1:1:1:0:2:1:1:1:1", "3:1::1:1:1:1:0:2:1:1:1:1", "3:2::1:1:1:1:0:2:1:1:1:1", "3:3::1:1:1:1:0:2:1:1:1:1" ] }, "scene1": { "cols": 3, "layout": [], "rows": 3 } }, "videowall1": { "cols": 2, "rows": 3, "layouts": { "vlayout1": { "cols": 2, "rows": 3, "layout": [ "1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1", "1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1" ] }, "vlayout1_new": { "cols": 2, "rows": 3, "layout": [ "1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1", "1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1" ] } }, "code": 0 }
```

vwid get {videowall_name}

Function

Get vwid {videowall_name}'s info

Example

vwid get videowall1

```
{ "cmd": "vwid
videowall1", "info": { "cols": 2, "rows": 3, "layouts": { "vlayout1": { "cols": 2, "rows": 3, "layout": [ "1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1", "1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1" ] }, "vlayout1_new": { "cols": 2, "rows": 3, "layout": [ "1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1", "1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1" ] } }, "code": 0 }
```

vwid rm {videowall_name}

Function

Delete vwid {videowall_name}

Example

vwid rm videowall1

```
{ "cmd": "vwid rm videowall1", "info": "OK", "code": 0 }
```

vwid add {videowall_name} {rows} {cols}

Function

Add vwid, name is videowall_name, total rows is {rows}, total columns is {cols}

Example

```
vwid add videowall1 2 2
```

```
{"cmd":"vwid add videowall1 2 2","info":"OK","code":0}
```

vwid setrowcol {videowall_name} {rows} {cols}**Function**

Set {rows} and {cols} of {videowall_name}

Example

```
vwid setrowcol videowall1 5 5
```

```
{"cmd":"vwid setrowcol videowall1 5 5","info":"OK","code":0}
```

vwid layout add {videowall_name} {layout_name}**Function**

Add a layout on {videowall_name}, its name is {layout_name}. Note: {videowall_name}'s rows and cols value will be automatically copied to {layout_name}'s rows and cols.

Example

```
vwid layout add videowall1 vlayout1
```

```
{"cmd":"vwid layout add videowall1 vlayout1","info":"OK","code":0}
```

vwid layout setrowcol {videowall_name} {layout_name} {rows} {cols}**Function**

Set layout {layout_name}'s row and column to {rows} and {cols} of {videowall_name}. Note: {videowall_name}'s rows and columns will be automatically modified to {rows} and {cols}.

Example

```
vwid layout setrowcol videowall1 vlayout1 3 2
```

```
{"cmd":"vwid layout setrowcol videowall1 vlayout1 3 2","info":"OK","code":0}
```

vwid layout list {videowall_name}

Function

Get layout list of vwid

Example

vwid layout list videowall1

```
{"cmd":"vwid layout list videowall1","info":{"vlayout1":{"cols":2,"rows":3,"layout":["1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1","1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1"]},"vlayout1_new":{"cols":2,"rows":3,"layout":["1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1","1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1"]}},"code":0}
```

vwid layout get {videowall_name} {layout_name}

Function

Get {layout_name}'s info of {videowall_name}.

Example

vwid layout get videowall1 vlayout1

```
{"cmd":"vwid layout get videowall1 vlayout1","info":{"cols":2,"rows":3,"layout":["1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1","1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1"]},"code":0}
```

vwid layout set {videowall_name} {layout_name} ...

Command

Format:

vwid layout set {videowall_name} {layout_name} row:col:tx:rx:vwrows:vwcols:vwrow:vwcol:rotate:stretch:vw:ow:vh:oh
row:col:tx:rx:vwrows:vwcols:vwrow:vwcol:rotate:stretch:vw:ow:vh:oh ...

Function

Set **row:col:tx:rx:vwrows:vwcols:vwrow:vwcol:rotate:stretch:vw:ow:vh:oh** in {layout_name} of {videowall_name}.

row: the row in the layout, start with 1.

col: the column in the layout, start with 1.

tx: the encoder device id or mac.

rx: the decoder device id or mac.

vwrows: in internal video wall total rows.

vwcols: in internal video wall total columns.

vwrow: the device in the row of internal video wall.

vwcol: the device in the column of internal video wall.

Note: When make matrix, vwrows:vwcols:vwrow:vwcol will be 1:1:1:1

rotate: the roata can be 0, 180 or 270.

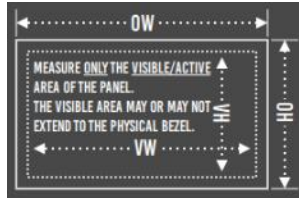
stretch: the stretch can be 1 or 2. 1 is stretch out, 2 is fit in.

vw: visible width of display.

ow: outer width of display.

vh: visible height of display.

oh: outer height of display.



Note: these params join with ":", can connect more than one value, each value is separated by spaces, vw:ow:vh:oh default value is 1:1:1:1.

Example

```
vwid layout set videowall1 vlayout1 1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1 1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1
```

```
2:1:TX1:RX3:2:2:1:1:180:2:1:1:1:1 2:2:TX1:RX4:2:2:1:2:180:2 3:1:TX1:RX5:2:2:2:1:0:2:1:1:1:1
```

```
{"cmd":"vwid layout set videowall1 vlayout1 1:1:TX1:RX1:1:1:1:1:0:2:1:1:1:1 1:2:TX1:RX2:1:1:1:1:0:2:1:1:1:1
```

```
2:1:TX1:RX3:2:2:1:1:180:2:1:1:1:1 2:2:TX1:RX4:2:2:1:2:180:2 3:1:TX1:RX5:2:2:2:1:0:2:1:1:1:1","info":"OK","code":0}
```

vwid layout osd {videowall_name} {layout_name} {on/off}

Function

Show or hide osd on {layout_name} of {videowall_name}

Example

```
vwid layout osd videowall1 vlayout1 on
```

```
{"cmd":"vwid layout osd videowall1 vlayout1 on","info":"OK","code":0}
```

or

```
vwid layout osd videowall1 vlayout1 off
```

```
{"cmd":"vwid layout osd videowall1 vlayout1 off","info":"OK","code":0}
```

vwid layout rm {videowall_name} {layout_name}

Function

Remove {layout_name} of {videowall_name}.

Example

```
vwid layout rm videowall1 vlayout1
```

```
{"cmd":"vwid layout rm videowall1 vlayout1","info":"OK","code":0}
```

vwid layout copy {videowall_name} {layout_name} {new_layout_name}

Function

Copy {layout_name} of {videowall_name} to new layout named {new_layout_name}.

Example

vwid layout copy videowall1 vlayout1 vlayout1_new

```
{"cmd":"vwid layout copy videowall1 vlayout1 vlayout1_new","info":"OK","code":0}
```

vwid layout active {videowall_name} {layout_name}

Function

Active {layout_name} of {videowall_name}.

Example

vwid layout active videowall1 vlayout1

```
{"cmd":"vwid layout active videowall1 vlayout1","info":"OK","code":0}
```

vwid layout combine {videowall_name} {layout_name} {leftTopRX_ID or row:col} {vwrow} {vwcol}

Function

Combine {layout_name} of {videowall_name} from left top RX or left top RX's position row and col to VIDEO WALL(vwrow and vwcol).

Example

vwid layout combine videowall1 vlayout1 1:2 1 2

```
{"cmd":"vwid layout combine videowall1 vlayout1 1:2 1 2","info":"OK","code":0}
```

or

vwid layout combine videowall1 vlayout1 RX1 1 2

```
{"cmd":"vwid layout combine videowall1 vlayout1 RX1 1 2","info":"OK","code":0}
```


vwid layout split {videowall_name} {layout_name} {RX_ID or row:col}

Function

Split {layout_name} of {videowall_name} RX_ID(or row:col) to MATRIX.

Example

vwid layout split videowall1 vlayout1 1:2

```
{"cmd":"vwid layout split videowall1 vlayout1 1:2","info":"OK","code":0}
```

or

vwid layout split videowall1 vlayout1 RX1

```
{"cmd":"vwid layout split videowall1 vlayout1 RX1","info":"OK","code":0}
```

IPC mosaic Commands

Use for mosaic videowall and layout setting.

vw mosaic list

Function

Get mosaic list

Example

vw mosaic list

```
{"cmd":"vw mosaic list","info":{"videowall1":{"cols":2,"rows":2,"layouts":{"layout1":{"layout":{"captureLeftOffset":0,"canvasHeight":1080,"client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":0,"canvasWidth":1920,"index":1,"captureWidth":960,"captureHeight":541,"resolution":5,"captureTopOffset":0},"captureLeftOffset":960,"canvasHeight":1080,"client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":0,"canvasWidth":1920,"index":2,"captureWidth":960,"captureHeight":541,"resolution":5,"captureTopOffset":0},"captureLeftOffset":0,"canvasHeight":1080,"client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":0,"canvasWidth":1920,"index":3,"captureWidth":960,"captureHeight":541,"resolution":5,"captureTopOffset":541},"captureLeftOffset":960,"canvasHeight":1080,"client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":0,"canvasWidth":1920,"index":4,"captureWidth":960,"captureHeight":541,"resolution":5,"captureTopOffset":541}}},"displays":[],"totalOutputs":3},"code":0}
```

vw mosaic get {videowall_name}

Function

Get mosaic videowall {videowall_name}'s info

Example

vw mosaic get videowall1

```
{ "cmd": "vw mosaic get videowall1", "info": { "cols": 2, "rows": 2, "layouts": { "layout1": { "layout": { "captureLeftOffset": 0, "canvasHeight": 1080, "client": "188A6A45C4A5", "host": "188A6A8CC3DC", "rotation": 0, "canvasWidth": 1920, "index": 1, "captureWidth": 960, "captureHeight": 541, "resolution": 5, "captureTopOffset": 0 }, { "captureLeftOffset": 960, "canvasHeight": 1080, "client": "188A6A45C4A5", "host": "188A6A8CC3DC", "rotation": 0, "canvasWidth": 1920, "index": 2, "captureWidth": 960, "captureHeight": 541, "resolution": 5, "captureTopOffset": 0 }, { "captureLeftOffset": 0, "canvasHeight": 1080, "client": "188A6A45C4A5", "host": "188A6A8CC3DC", "rotation": 0, "canvasWidth": 1920, "index": 3, "captureWidth": 960, "captureHeight": 541, "resolution": 5, "captureTopOffset": 541 }, { "captureLeftOffset": 960, "canvasHeight": 1080, "client": "188A6A45C4A5", "host": "188A6A8CC3DC", "rotation": 0, "canvasWidth": 1920, "index": 4, "captureWidth": 960, "captureHeight": 541, "resolution": 5, "captureTopOffset": 541 } } }, "displays": [], "totalOutputs": 3 }, "code": 0 }
```

vw mosaic rm {videowall_name}

Function

Delete mosaic videowall {videowall_name}

Example

vw mosaic rm videowall1

```
{ "cmd": "vw mosaic rm videowall1", "info": "OK", "code": 0 }
```

vw mosaic add {videowall_name} {rows} {cols} {total_outputs}

Function

Add or modify mosaic videowall, name is videowall_name, total rows is {rows}, total columns is {cols}, actual total outputs is {total_outputs}.

Example

vw mosaic add videowall1 2 2 3

```
{ "cmd": "vw mosaic add videowall1 2 2 3", "info": "OK", "code": 0 }
```

vw mosaic layout add {videowall_name} {layout_name}

Function

Add a layout on {videowall_name}, its name is {layout_name}.

Example

vw mosaic layout add videowall1 layout1

```
{"cmd":"vw mosaic layout add videowall1 layout1","info":"OK","code":0}
```

vw mosaic layout list {videowall_name}

Function

Get layout list of mosaic videowall

Example

vw mosaic layout list videowall1

```
{"cmd":"vw mosaic layout list videowall1","info":{"layout1":{"layout":{"captureLeftOffset":"0","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":1,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"0"},{"captureLeftOffset":"960","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":2,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"0"},{"captureLeftOffset":"0","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":3,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"541"},{"captureLeftOffset":"960","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":4,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"541"}}},"code":0}
```

vw mosaic layout get {videowall_name} {layout_name}

Function

Get {layout_name}'s info of {videowall_name}.

Example

vw mosaic layout get videowall1 layout1

```
{"cmd":"vw mosaic layout get videowall1 layout1","info":{"layout":{"captureLeftOffset":"0","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":1,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"0"},{"captureLeftOffset":"960","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":2,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"0"},{"captureLeftOffset":"0","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":3,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"541"},{"captureLeftOffset":"960","canvasHeight":"1080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":4,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"541"}}},"code":0}
```

```
080","client":"188A6A45C4A5","host":"188A6A8CC3DC","rotation":"0","canvasWidth":"1920","index":4,"captureWidth":"960","captureHeight":"541","resolution":5,"captureTopOffset":"541"}}, "code":0}
```

vw mosaic layout rm {videowall_name} {layout_name}

Function

Remove {layout_name} of {videowall_name}.

Example

```
vw mosaic layout rm videowall1 layout1
```

```
{"cmd":"vw mosaic layout rm videowall1 layout1","info":"OK","code":0}
```

vw mosaic layout canvas {videowall_name} {layout_name} {indexid} {canvasWidth} {canvasHeight}

Function

Set the source canvas's canvasWidth and canvasHeight of {layout_name}. Indexid's value is from output1 to {total_outputs}.

Note: Default canvasWidth is 1920, and default canvasHeight is 1080.

Example

```
vw mosaic layout canvas videowall1 layout1 1 1920 1080
```

```
{"cmd":"vw mosaic layout canvas videowall1 layout1 1 1920 1080","info":"OK","code":0}
```

```
vw mosaic layout canvas videowall1 layout1 2 1920 1080
```

```
{"cmd":"vw mosaic layout canvas videowall1 layout1 2 1920 1080","info":"OK","code":0}
```

```
vw mosaic layout canvas videowall1 layout1 3 1920 1080
```

```
{"cmd":"vw mosaic layout canvas videowall1 layout1 3 1920 1080","info":"OK","code":0}
```

```
vw mosaic layout canvas videowall1 layout1 4 1920 1080
```

```
{"cmd":"vw mosaic layout canvas videowall1 layout1 4 1920 1080","info":"OK","code":0}
```

vw mosaic layout capture {videowall_name} {layout_name} {indexid} {captureWidth} {captureHeight} {captureLeftOffset} {captureTopOffset}

Function

In the mosaic layout {videowall_name} {layout_name}, capture the width{captureWidth} and height{captureHeight} of the output {indexid}, and the offset of the upper left corner from the origin is {captureLeftOffset} and {captureTopOffset}.

Example

```
//left top
vw mosaic layout capture videowall1 layout1 1 960 541 0 0
{"cmd":"vw mosaic layout capture videowall1 layout1 1 960 541 0 0","info":"OK","code":0}

//right top
vw mosaic layout capture videowall1 layout1 2 960 541 960 0
{"cmd":"vw mosaic layout capture videowall1 layout1 2 960 541 960 0","info":"OK","code":0}

//left bottom
vw mosaic layout capture videowall1 layout1 3 960 541 0 541
{"cmd":"vw mosaic layout capture videowall1 layout1 3 960 541 0 541","info":"OK","code":0}

//right bottom
vw mosaic layout capture videowall1 layout1 4 960 541 960 541
{"cmd":"vw mosaic layout capture videowall1 layout1 4 960 541 960 541","info":"OK","code":0}
```

vw mosaic layout resolution {videowall_name} {layout_name} {indexid} {resolution}

Function

In the mosaic layout {videowall_name} {layout_name}, set {resolution} of the output {indexid}.

The {resolution} is [0~8], 0:passthrough, 1:720P50, 2:720P60, 3:1080P24, 4:1080P50, 5:1080P60, 6:4K30, 7:4K50, 8:4K60.

Note: 0:passthrough is only for device AC-MXNET-1G-R.

Example

```
vw mosaic layout resolution videowall1 layout1 1 5
{"cmd":"vw mosaic layout resolution videowall1 layout1 1 5","info":"OK","code":0}

vw mosaic layout resolution videowall1 layout1 2 5
{"cmd":"vw mosaic layout resolution videowall1 layout1 2 5","info":"OK","code":0}

vw mosaic layout resolution videowall1 layout1 3 5
{"cmd":"vw mosaic layout resolution videowall1 layout1 3 5","info":"OK","code":0}
```

vw mosaic layout resolution videowall1 layout1 4 5

```
{"cmd":"vw mosaic layout resolution videowall1 layout1 4 5","info":"OK","code":0}
```

vw mosaic layout rotation {videowall_name} {layout_name} {indexid} {rotation}

Function

In the mosaic layout {videowall_name} {layout_name}, set {rotation} of the output {indexid}.

The {rotation} is [0,180,270].

Note: Rotation 180 and 270 are only for device AC-MXNET-1G-R.

Example

vw mosaic layout rotation videowall1 layout1 1 0

```
{"cmd":"vw mosaic layout rotation videowall1 layout1 1 0","info":"OK","code":0}
```

vw mosaic layout rotation videowall1 layout1 2 0

```
{"cmd":"vw mosaic layout rotation videowall1 layout1 2 0","info":"OK","code":0}
```

vw mosaic layout rotation videowall1 layout1 3 0

```
{"cmd":"vw mosaic layout rotation videowall1 layout1 3 0","info":"OK","code":0}
```

vw mosaic layout rotation videowall1 layout1 4 0

```
{"cmd":"vw mosaic layout rotation videowall1 layout1 4 0","info":"OK","code":0}
```

vw mosaic layout tx {videowall_name} {layout_name} {indexid} {TxID/TxMAC}

Function

In the mosaic layout {videowall_name} {layout_name}, set tx {TxID/TxMAC} of the output {indexid}.

Example

vw mosaic layout tx videowall1 layout1 1 188A6A8CC3DC

```
{"cmd":"vw mosaic layout tx videowall1 layout1 1 188A6A8CC3DC","info":"OK","code":0}
```

vw mosaic layout tx videowall1 layout1 2 188A6A8CC3DC

```
{"cmd":"vw mosaic layout tx videowall1 layout1 2 188A6A8CC3DC","info":"OK","code":0}
```

vw mosaic layout tx videowall1 layout1 3 188A6A8CC3DC

```
{"cmd":"vw mosaic layout tx videowall1 layout1 3 188A6A8CC3DC","info":"OK","code":0}
```

vw mosaic layout tx videowall1 layout1 4 188A6A8CC3DC

```
{"cmd":"vw mosaic layout tx videowall1 layout1 4 188A6A8CC3DC","info":"OK","code":0}
```

vw mosaic layout rx {videowall_name} {layout_name} {indexid} {TxID/TxMAC}

Function

In the mosaic layout {videowall_name} {layout_name}, set rx {RxID/RxMAC} of the output {indexid}.

Example

vw mosaic layout rx videowall1 layout1 1 188A6A45C4A5

```
{"cmd":"vw mosaic layout rx videowall1 layout1 1 188A6A45C4A5","info":"OK","code":0}
```

vw mosaic layout rx videowall1 layout1 2 188A6A45C4A6

```
{"cmd":"vw mosaic layout rx videowall1 layout1 2 188A6A45C4A6","info":"OK","code":0}
```

vw mosaic layout rx videowall1 layout1 3 188A6A45C4A7

```
{"cmd":"vw mosaic layout rx videowall1 layout1 3 188A6A45C4A7","info":"OK","code":0}
```

vw mosaic layout rx videowall1 layout1 4 188A6A45C4A8

```
{"cmd":"vw mosaic layout rx videowall1 layout1 4 188A6A45C4A8","info":"OK","code":0}
```

vw mosaic layout osd {videowall_name} {layout_name} {on/off} {on/off}

Function

Show or hide osd on {layout_name} of {videowall_name}

Example

vw mosaic layout osd videowall1 layout1 on

```
{"cmd":"vw mosaic layout osd videowall1 layout1 on","info":"OK","code":0}
```

or

vw mosaic layout osd videowall1 layout1 off

```
{"cmd":"vw mosaic layout osd videowall1 layout1 off","info":"OK","code":0}
```

vw mosaic layout copy {videowall_name} {layout_name} {new_layout_name}

Function

Copy {layout_name} of {videowall_name} to new layout named {new_layout_name}.

Example

vw mosaic layout copy videowall1 layout1 layout1_new

```
{"cmd":"vw mosaic layout copy videowall1 layout1 layout1_new","info":"OK","code":0}
```

vw mosaic layout active {videowall_name} {layout_name}

Function

Active {layout_name} of {videowall_name}.

Example

vw mosaic layout active videowall1 layout1

```
{"cmd":"vw mosaic layout active videowall1 layout 1","info":"OK","code":0}
```

IPC kvm Commands

Use for kvm roaming.

kvm list

Function

Get kvm list

Example

kvm list

```
{"cmd":"kvm  
list","info":{"kvm1":{"cols":2,"rows":3,"layout":["1:1:tx1:rx1:0","1:2:tx2:rx2:0","2:1:tx3:rx3:0","2:2:tx4:rx4:1","3:1:tx5:rx5:0","3:2:tx  
6:rx6:0"]}},"code":0}
```

kvm get {kvm_name}

Function

Get info of {kvm_name}

Example

kvm get kvm1

```
{"cmd":"kvm get  
kvm1","info":{"cols":2,"rows":3,"layout":["1:1:tx1:rx1:0","1:2:tx2:rx2:0","2:1:tx3:rx3:0","2:2:tx4:rx4:1","3:1:tx5:rx5:0","3:2:tx6:rx6:
```



```
0"}}, "code": 0}
```

kvm add {kvm_name} {rows} {cols}

Function

Add {kvm_name}, its row and col is {rows} and {cols}.

Example

```
kvm add kvm1 3 2
```

```
{"cmd": "kvm add kvm1 3 2", "info": "OK", "code": 0}
```

kvm rm {kvm_name}

Function

Remove kvm {kvm_name}.

Example

```
kvm rm kvm1
```

```
{"cmd": "kvm rm kvm1", "info": "OK", "code": 0}
```

kvm set {kvm_name} row:col:tx:rx:isprimary

row:col:tx:rxisprimary ...

Function

Set kvm {kvm_name}'s info in row and col.

row: The row in kvm's rows.

col: The col in kvm's cols.

tx: encoder.

rx: decoder.

isprimary: Its value is 1 or 0. 1 means the rx is primary, 0 means the rx is secondary. **Note, only one primary in one kvm.**

Example

```
kvm set kvm1 1:1:tx1:rx1:0 1:2:tx2:rx2:0 2:1:tx3:rx3:0 2:2:tx4:rx4:1 3:1:tx5:rx5:0 3:2:tx6:rx6:0
```

```
{"cmd": "kvm set kvm1 1:1:tx1:rx1:0 1:2:tx2:rx2:0 2:1:tx3:rx3:0 2:2:tx4:rx4:1 3:1:tx5:rx5:0 3:2:tx6:rx6:0", "info": "OK", "code": 0}
```

kvm osd {kvm_name} {on/off}

Function

Set {kvm_name}'s osd on or off.

Example

kvm osd kvm1 on

```
{"cmd": "kvm osd kvm1 on", "info": "OK", "code": 0}
```

or

kvm osd kvm1 off

```
{"cmd": "kvm osd kvm1 off", "info": "OK", "code": 0}
```

kvm setrowcol {kvm_name} {rows} {cols}

Function

Modify {kvm_name}'s rows and cols to {rows} and {cols}.

Example

kvm setrowcol kvm1 3 2

```
{"cmd": "kvm setrowcol kvm1 3 2", "info": "OK", "code": 0}
```

kvm active {kvm_name}

Function

Active {kvm_name}. **Note, this command will make decoder's video, audio, usb be switched to corresponding encoder.**

Example

kvm active kvm1

```
{"cmd": "kvm active kvm1", "info": "OK", "code": 0}
```