



ANALOG WAY®

# Programmer's Guide For OPS300



## A1: Introduction

If you need to use your own Software Control program from a PC or WORKSTATION with an RS-232 or LAN port, the device allows communication through an ASCII code protocol.

The device treats any character that it receives on the RS-232 or LAN as a possible command but only accepts legal commands. There is no starting/ending code needed in a command string.

A command can be a single character typed on a keyboard and does not require any special character before or after it. (It is not necessary to press "ENTER" on the keyboard). A command can be preceded by a value (See chapter A-2).

When the device receives a valid command, it will execute the command. Then it will send back the status of the parameters that have changed due to this command.

If the command cannot be executed (value out of range, no signal on the selected input), etc. The device will just send back the current status of the corresponding parameters.

If the command is invalid, an error response will be returned to the control device. All responses returned to the control device end with a carriage return <CR> and a line feed <LF> signaling the end of the response character string (see chapter A-3).

## A2: Commands structure

The above listed devices share the same code structure.

Commands are made of numerical values for arguments followed by the command characters (one or Two case-sensitive alphabetical letters). Usually the same characters (letters) are used for the [read Command] as well as the [write command].

The indexes are defined numbers indicating the how the arguments for the command apply. For example a layer number, an input number, a preset number, etc. They are separated with a comma.

There are commands without index and others with up to 3 indexes. Each index is followed by a comma character. The final argument, also referred to as the "value" does not have a comma between it and the command.



A [write command] is made of indexes followed by the numerical value followed by the command characters.

Write command = [[index,] ...] + Value + Character (s) code (s)

For example: "1,2,0IN" or "4YB"

A [read command] is made of indexes followed immediately by the command characters. (no numerical value)

Read command = [[index,] ...] Character (s) code (s)

For example: "1,2,IN" or "YB"

## A3: Examples

### Document notation:

1) Command without index : *SWITCHER\_MODE*

Command to set the switcher mode to mixer mode: 0CM

Answer: CM0<CR><LF> which mean that the device is now working in mixer mode.

2) Command with 1 index : *OFORMAT*

Command to set the Main output format to XGA: 0,12OF

Answer: OF0,12<CR><LF> which mean that the main output format is now 1024x768

3) Command with 2 indexes : *PE\_INPUTNUM*

Command to set the input 4 displayed in background layer of Next Preset: 1,2,4IN

Answer: IN1,1,4<CR><LF> which mean that the background layer of the next preset will display the input 4 signal

4) Read command without index : *TAKEAVA*

Read command to know if the TAKE command is available: TA

Answer: TA1<CR><LF> which mean that the device is ready to accept the TAKE command.



5) Read command with 2 indexes : *SET\_ASPECT\_RATIO\_OUT*

Read command to know how is displayed a signal plugged on the input 4: 3,so  
 Answer: so3,2<CR><LF> which mean that the input 4 is displayed cropped

**A4: Error codes**

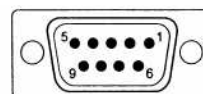
Answer: **E10**<CR><LF> which mean invalid command  
 Answer: **E11**<CR><LF> which mean index value error (index value out of range)  
 Answer: **E12**<CR><LF> which mean index number error (too or few indexes)

Some commands are only available as **[Read command]**, they are status and are colored in blue as this line.  
 Some commands are colored in yellow as this line to indicate they were added or modified in this version.

**A5 COMMUNICATION PORTS**

• **REMOTE RS-232 (on DB 9 female connector)**

*Level:* RS-232.  
*Data Rate:* 9600 Bauds, 8 data bits, 1 stop bit, no parity bit, no flow control.



DB9 Female connector

| PIN # | FUNCTION                  |
|-------|---------------------------|
| 1     | tally # 1                 |
| 2     | Tx (transmit data)        |
| 3     | Rx (receive data)         |
| 4     | reserved for manufacturer |
| 5     | Ground                    |
| 6     | tally # 2                 |
| 7     | NC                        |
| 8     | reserved for manufacturer |
| 9     | tally # 3                 |

• **TALLY OUT (on DB 9 female connector)**

*Rating:* 20 Vdc MAX, 50 mA MAX (open collector).

• **LAN (on RJ45 connector)**

*Protocol:* UDP (User Datagram Protocol) or TCP (Transmission Control Protocol).

*Data Rate:* 10 / 100 Mbps.

*LED functions (on RJ45 connector):*

| Top LED | Bottom LED | Meaning          |
|---------|------------|------------------|
| OFF     | OFF        | No link          |
| OFF     | ON         | 100 BASE-T link. |
| ON      | OFF        | 10 BASE-T link.  |



| Group    | Name               | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values   | Index #1 | Index #2 |
|----------|--------------------|-----|------|---|--------------|-----------|-----------|---------------|--|----------|----------|
| SYSTEM   | DIESE              | #   | #    | Request the retrieval of all the variables                    | Rd/Wr        | 0         | 1         | 0             |  |          |          |
|          | READY              | *   | *    | Ready Device Flag   | Rd           | 0         | 1         | 0             | 0 = Initialization in progress<br>1 = Ready  |          |          |
|          | DEV                | ?   | DEV  | MMS device type   | Rd           | 74        | 74        | 74            | 74 = OPS-300   |          |          |
| CONTROLS | UPDATER            | yU  | yU   | Device reboot for update                                      | Rd/Wr        | 0         | 255       | 0             | 1 then 254 => Reboot   |          |          |
|          | FACTORYRESET       | YR  | YR   | Apply factory settings to the device( except image settings ) | Rd/Wr        | 0         | 1         | 0             | Auto reset   |          |          |
|          | POSMEMORYRESET     | YE  | YE   | Erase stored image settings                                   | Rd/Wr        | 0         | 1         | 0             | Auto reset   |          |          |
|          | CSTORE             | YS  | YS   | FLASH memory writing in progress. Do not power off            | Rd           | 0         | 1         | 0             | 0 = Free<br>1 = Flash writing in progress  |          |          |
|          | LOCK               | YK  | YK   | Device locking  | Rd/Wr        | 0         | 2         | 0             | 0 = No lock<br>1 = Locked menu<br>2 = Locked front panel   |          |          |
|          | Lcdbrightness      | YB  | YB   | Front panel display brightness                                | Rd/Wr        | 1         | 8         | 8             | 1, ..., 8 = Brightness level, 12,5% step   |          |          |
|          | KEYBRIGHTNESS      | Yb  | Yb   | Front panel keys brightness                                   | Rd/Wr        | 10        | 100       | 100           | 1, ..., 100 = Brightness level, 1% step  |          |          |
|          | TBAR_ENABLE        | YD  | YD   | Enable disable T-BAR  | Rd/Wr        | 0         | 1         | 1             |  |          |          |
|          | COPKIND            | CK  | CK   | Kind of slow in-progress operation                            | Rd           | 0         | 6         | 0             | 0 = None<br>1 = Auto centering<br>2 = Auto setting<br>3 = StandBy<br>4 = Picture recording<br>5 = Reset to default factory setting<br>6 = Reset User settings  |          |          |
|          | COPPROGRESS        | CP  | CP   | Progress percent of the slow operation                        | Rd           | 0         | 100       | 0             | Percent : 0 to 100%  |          |          |
|          | PRESET_MATRIX_MGMT | CR  | CR   | Preset management in matrix mode from the front panel         | Rd/Wr        | 0         | 3         | 0             | 0 = Preset management for both outputs<br>1 = Preset management for current output<br>2 = Preset management for output 1<br>3 = Preset management for output 2 |          |          |
|          | SWITCHER_MODE      | CM  | CM   | Device operating mode   | Rd/Wr        | 0         | 1         | 0             | 0 = Seamless switcher mode<br>1 = Matrix mode  |          |          |
|          | AXION              | yA  | yA   | Device is driven by Orchestra                                 | Rd/Wr        | 0         | 1         | 0             | 0 = Device is not driven by ORC-50<br>1 = Device is driven by Orc-50   |          |          |
|          | AUTO_LOCK          | YL  | YL   | Forbide the use of a signal-less input                        | Rd/Wr        | 0         | 1         | 1             | 0 = Signal less input can be selected<br>1 = Signal less input can not be selected   |          |          |
|          | AUTO_TAKE          | YT  | YT   | Automatic Take after an input change                          | Rd/Wr        | 0         | 1         | 0             | 0 = AUTO-TAKE Disable<br>1 = AUTO-TAKE Enable  |          |          |



| Group   | Name                   | Cmd | Resp | Description  | Read / Write | Min value | Max value | Default value | Values   | Index #1         | Index #2 |
|---------|------------------------|-----|------|--|--------------|-----------|-----------|---------------|--|------------------|----------|
|         | AUTO_STEPBACK          | Ys  | Ys   | Automatic preset toggle after a TAKE                               | Rd/Wr        | 0         | 1         | 0             | 0 = AUTO- PRESET-TOGGLE Disable<br>1 = AUTO- PRESET-TOGGLE Enable  |                  |          |
|         | FREEZE_MODE            | Ym  | Ym   | Input freeze mode  | Rd/Wr        | 0         | 1         | 0             | 0 = Freeze by input<br>1 = Freeze all inputs   |                  |          |
|         | FRAME_ALERT            | Yf  | Yf   | Back-up input when an input loose its signal                       | Rd/Wr        | 0         | 12        | 0             | 0 = No input<br>1 = Input1<br>2 = Input2<br>3 = Input3<br>4 = Input4<br>5 = Input5<br>6 = Input6<br>7 = Input7<br>8 = Input8<br>9 = Input9<br>10 = Input10<br>11 = Input11<br>12 = Input12 |                  |          |
|         | TRANSPARENT_BACKGROUND | Yt  | Yt   | Disable the the black filling of the bakgroundd live layer         | Rd/Wr        | 0         | 1         | 1             | 0 = use BLACK_FILL<br>1 = Disable black filling only for background  |                  |          |
|         | BLACK_FILL             | bF  | bF   | Fill PIP with black depending on the aspect ratio                  | Rd/Wr        | 0         | 1         | 0             | 0 = Disable black filling<br>1 = Enable black filling  |                  |          |
|         | DISABLE_ID             | bl  | bl   | Disable Frame and lds on the preview output                        | Rd/Wr        | 0         | 1         | 0             |  |                  |          |
| STANDBY | STDBYSTATUS            | wS  | wS   | Standby mode   | Rd/Wr        | 0         | 1         | 0             | 0 = Normal mode<br>1 = Standby mode  |                  |          |
|         | STDBYREQUEST           | wQ  | wQ   | Request for standby or wake up                                     | Rd/Wr        | 0         | 1         | 0             | 0 = Wake up<br>1 = Standby   |                  |          |
|         | STDBYPROJ_ON           | wN  | wN   | Message to wake-up an output display device ( 50 characters)       | Rd/Wr        | 0         | 255       | 0             |  | min = 0 max = 49 |          |
|         | STDBYPROJ_OFF          | wF  | wF   | Message to send an output display device to sleep ( 50 characters) | Rd/Wr        | 0         | 255       | 0             |  | min = 0 max = 49 |          |
|         | STDBYPROJ_RATE         | wR  | wR   | Output display device UART speed                                   | Rd/Wr        | 0         | 3         | 2             | 0 = 1200bauds<br>1 = 2400bauds<br>2 = 9600bauds<br>3 = 19200bauds  |                  |          |
|         | STDBYPROJ_CTRL         | wC  | wC   |  | Rd/Wr        | 0         | 4         | 0             | 0 = No request<br>1 = Wake up request<br>2 = Standby request<br>3 = Clear Wake up message<br>4 = Clear standby message   |                  |          |
| VERSION | VERI1                  | xi  | xi   | Byte 0 and 1 of the device ID                                      | Rd           | 0         | 65535     | 0             | ex : AAAA  |                  |          |
|         | VERI2                  | xj  | xj   | Byte 2 and 3 of the device ID                                      | Rd           | 0         | 65535     | 0             | ex : AAAA  |                  |          |



| Group | Name           | Cmd | Resp | Description                                     | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2 |
|-------|----------------|-----|------|---|--------------|-----------|-----------|---------------|--|--|----------|
|       | VERI3          | xk  | xk   | Byte 4 and 5 of the device ID                   | Rd           | 0         | 65535     | 0             | ex : AAAA  |  |          |
|       | VERI4          | xl  | xl   | Byte 6 and 7 of the device ID                   | Rd           | 0         | 65535     | 0             | ex : AAAA  |  |          |
|       | VERK           | xK  | xK   | Checksum/version of the programmable components | Rd/Wr        | 0         | 65535     | 0             |  | 0 = Number of programmables components<br>1 = Main micro-controller<br>2 = Front panel micro-controller<br>3 = FPGA Caecina<br>4 = FPGA Fannia<br>5 = FPGA Thrasea<br>6 = Synchro CPLD |          |
|       | VERV           | xV  | xV   | Variable set version                            | Rd           | 0         | 65535     | 42            |  |  |          |
|       | VERUPD         | xU  | xU   | Updater version                                 | Rd           | 0         | 65535     | 0             |  |  |          |
|       | OPT            | yo  | yo   | Detected options                                | Rd           | 0         | 65535     | 0             | bit 0 = Lan Module<br>bit 1 = SDI In 1 board (SDI 1 and 2)<br>bit 2 = Recording board<br>bit 3 = CF Caecina<br>bit 4 = CF Fannia<br>bit 5 = CF Thrasea<br>bit 6 = SDI In 2 board (SDI 3 and 4)<br>bit 7 = Audio Evolution<br>bit 8 = HDCP DVI In Evolution |  |          |
|       | REV            | xR  | xR   | Moher board revision                            | Rd           | 0         | 255       | 0             |  |  |          |
| INPUT | IN_AUTOSET_ALL | la  | la   | Auto-setting request for all the inputs         | Rd/Wr        | 0         | 1         | 0             |  |  |          |
|       | IN_AUTOSET     | li  | li   | Auto-setting request for the specified input    | Rd/Wr        | 0         | 1         | 0             |  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12              |          |



| Group | Name          | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |  |
|-------|---------------|-----|------|---|--------------|-----------|-----------|---------------|---|---|----------|--|
|       | IN_USR_FORMAT | iU  | iU   | Format/standard of the input signal corrected by user | Rd/Wr        | 0         | 42        | 0             | 0 = None<br>1 = Invalid<br>2 = Unknown<br>3 = SDTV NTSC<br>4 = SDTV PAL<br>5 = SDTV SECAM<br>6 = SDTV BW<br>7 = SDTV 480i<br>8 = SDTV 576i<br>9 = EDTV 480p<br>10 = EDTV 576p<br>11 = HDTV 720p<br>12 = HDTV 1035i<br>13 = HDTV 1080i<br>14 = HDTV 1080p<br>15 = HDTV 1080sF<br>16 = CPU VGA<br>17 = CPU 800x480<br>18 = CPU WVGA<br>19 = CPU SVGA<br>20 = CPU 1280x600<br>21 = CPU 720p RGB<br>22 = CPU XGA<br>23 = CPU WXGA<br>24 = CPU SWXGA<br>25 = CPU 800p RGB<br>26 = CPU SWXGA+<br>27 = CPU 1152x864<br>28 = CPU 900p RGB<br>29 = CPU 1600x900<br>30 = CPU 960p RGB<br>31 = CPU SXGA<br>32 = CPU 1360x1024<br>33 = CPU DILA4/3<br>34 = CPU SXGA+<br>35 = CPU WSXGA+<br>36 = CPU 1080p RGB<br>37 = CPU 2K<br>38 = CPU UXGA<br>39 = CPU WUXGA<br>40 = CPU 1920x1440<br>41 = CPU QXGA<br>42 = CPU 1366x768 | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |  |





| Group | Name         | Cmd | Resp | Description        | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|--------------|-----|------|--------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | IN_TYPE      | iK  | iK   | Input signal type  | Rd/Wr        | 0         | 17        | 13            | 0 = SDTV Composite<br>1 = SDTV Y/C<br>2 = SDTV/EDTV/HDTV RGBS<br>TTL/Analog<br>3 = SDTV/EDTV/HDTV RGB SOG<br>4 = SDTV/EDTV/HDTV YUV<br>5 = Computer SOG<br>6 = Computer H&V or Composite<br>(TTL/Analog)<br>7 = Computer B&W<br>8 = DVI-D EDTV/HDTV RGB 16-235<br>9 = DVI-D EDTV/HDTV YUV<br>10 = DVI-D Computer RGB 0-255<br>11 = DVI-D Computer RGB 16-235<br>12 = SDI SDTV/HDTV<br>13 = Analog Computer, separated<br>H&V synchro<br>14 = Analog Computer, composite<br>TTL synchro<br>15 = Analog Computer, composite<br>analog synchro<br>16 = Analog RGB video, composite<br>TTL synchro<br>17 = Analog RGB video, composite<br>analog synchro | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_SYNC_LOAD | il  | il   | Analog H sync load | Rd/Wr        | 0         | 1         | 0             | 0 = Hi-Z<br>1 = 75 ohm loaded  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name      | Cmd | Resp | Description            | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|-----------|-----|------|------------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | IN_USED   | iu  | iu   | Input is enabled       | Rd/Wr        | 0         | 1         | 1             |  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_SD_STD | iS  | iS   | Decoded video standard | Rd/Wr        | 0         | 7         | 0             | 0 = Auto<br>1 = NTSC (M,J)<br>2 = PAL (BDGHIN)<br>3 = PAL (M)<br>4 = PAL (N-Combination)<br>5 = NTSC 4.43<br>6 = SECAM<br>7 = PAL 60 | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_SD_STA | iV  | iV   | Video Signal stability | Rd/Wr        | 0         | 1         | 1             | 0 = Stable Source ( DVD )<br>1 = VCR Source ( Video cassette recorder )  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group  | Name              | Cmd | Resp | Description                                    | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|--------|-------------------|-----|------|--|--------------|-----------|-----------|---------------|--|---|----------|
|        | IN_SYNCHRONIZED   | iY  | iY   | VIS Synchronisation group                      | Rd/Wr        | 0         | 4         | 0             | 0 = Does not belong to any VIS Group<br>1 = Groupe VIS 1 group for analog input<br>2 = Groupe VIS 2 group for analog input<br>3 = Groupe VIS 3 group for analog input<br>4 = Groupe VIS 4 group for analog input | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|        | IN_HDCP_ENABLE    | iH  | iH   | Enable/disable the HDCP support of a DVI input | Rd/Wr        | 0         | 1         | 1             |  | 8 = Input9<br>9 = Input10   |          |
|        | IN_HDCP_CABLE_LEN | iC  | iC   | Length of an DVI input cable                   | Rd/Wr        | 0         | 2         | 0             | 0 = Less than 10 meter cable length<br>1 = 5 to 20 meters cable length<br>2 = More than 15 meters cable length   | 8 = Input9<br>9 = Input10   |          |
| KEYING | IN_KEYING_TYPE    | KT  | KT   | Keying type                                    | Rd/Wr        | 0         | 4         | 0             | 0 = No keying<br>1 = Luma Key Keying<br>2 = ChromaKey Keying<br>3 = Luma Key Keying + DSK<br>4 = ChromaKey Keying + DSK  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|        | IN_KEYING_R_LEVEL | KR  | KR   | Keying level (Red )                            | Rd/Wr        | 0         | 255       | 0             |  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name              | Cmd | Resp | Description                                | Read / Write | Min value | Max value | Default value | Values | Index #1  | Index #2 |
|-------|-------------------|-----|------|--|--------------|-----------|-----------|---------------|--------|---|----------|
|       | IN_KEYING_G_LEVEL | KG  | KG   | Keying level (Green)                       | Rd/Wr        | 0         | 255       | 255           |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_KEYING_B_LEVEL | KB  | KB   | Keying level (Bule)                        | Rd/Wr        | 0         | 255       | 0             |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_KEYING_TOLER   | KH  | KH   | Keying Tolerance (for chroma and luma key) | Rd/Wr        | 0         | 255       | 10            |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name                      | Cmd | Resp | Description                  | Read / Write | Min value | Max value | Default value | Values | Index #1  | Index #2 |
|-------|---------------------------|-----|------|------------------------------|--------------|-----------|-----------|---------------|--------|---|----------|
|       | IN_KEYING_LUMA_LOW_LEVEL  | KL  | KL   | Minimum luma level           | Rd/Wr        | 0         | 255       | 0             |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_KEYING_LUMA_HIGH_LEVEL | KM  | KM   | Maximum luma level           | Rd/Wr        | 0         | 255       | 255           |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | IN_KEYING_DSK_ALPHA       | KA  | KA   | Brightness of DSK background | Rd/Wr        | 0         | 255       | 64            |        | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group        | Name                  | Cmd | Resp | Description  | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|--------------|-----------------------|-----|------|--|--------------|-----------|-----------|---------------|---|---|----------|
|              | IN_KEYING_INVERT      | KI  | KI   | Invert keying area   | Rd/Wr        | 0         | 1         | 0             |   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|              | IN_KEYING_GRAB_ENABLE | Kg  | Kg   | Enable/disable the keying color grabber mode                     | Rd/Wr        | 0         | 1         | 0             | 0 = Disable the grabber<br>1 = Enable the grabber |   |          |
|              | IN_KEYING_GRAB_GET    | Kc  | Kc   | Capture the color selected by the grabber and apply the settings | Rd/Wr        | 0         | 1         | 0             | Percent of OSCREEN_UTIL_H                         |   |          |
|              | IN_KEYING_GRAB_H      | Kh  | Kh   | Horizontal position of the grabber                               | Rd/Wr        | 0         | 65535     | 32768         | Percent of OSCREEN_UTIL_V                         |   |          |
|              | IN_KEYING_GRAB_V      | Kv  | Kv   | Vertical position of the grabber                                 | Rd/Wr        | 0         | 65535     | 32768         | Auto reset  |   |          |
| INPUT STATUS | SIG_HPOL              | sh  | sh   | Input H sync polarity  | Rd           | 0         | 1         | 0             | 0 = Negative Synchro<br>1 = Positive Synchro      | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|              | SIG_VPOL              | sv  | sv   | Input V sync polarity  | Rd           | 0         | 1         | 0             | 0 = Negative Synchro<br>1 = Positive Synchro      | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name           | Cmd | Resp | Description           | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|-------|----------------|-----|------|-----------------------|--------------|-----------|-----------|---------------|---|---|----------|
|       | SIG_SYNC_TYPE  | sK  | sK   | Input sync type       | Rd           | 0         | 3         | 0             | 0 = Séparated Synchros H&V<br>1 = Composite TTL Synchro<br>2 = Composite Analog Synchro<br>3 = Synchro on Green (SOG) | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SIG_FREQ_FIELD | sf  | sf   | Input frame frequency | Rd           | 0         | 65535     | 0             | Unit = 1/100Hz  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SIG_FREQ_LINE  | sl  | sl   | Input line frequency  | Rd           | 0         | 65535     | 0             | Unit = 1/100Hz  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name         | Cmd | Resp | Description          | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|--------------|-----|------|----------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | SIG_COMPLETE | sc  | sc   | Input scan completed | Rd           | 0         | 1         | 0             | 0 = scan in progress or failed<br>1 = scan completed | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |





| Group | Name                | Cmd | Resp | Description                | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |  |
|-------|---------------------|-----|------|----------------------------|--------------|-----------|-----------|---------------|---|---|----------|--|
|       | SIG_DETECTED_FORMAT | sD  | sD   | Input detected format name | Rd           | 0         | 42        | 0             | 0 = None<br>1 = Invalid<br>2 = Unknown<br>3 = SDTV NTSC<br>4 = SDTV PAL<br>5 = SDTV SECAM<br>6 = SDTV BW<br>7 = SDTV 480i<br>8 = SDTV 576i<br>9 = EDTV 480p<br>10 = EDTV 576p<br>11 = HDTV 720p<br>12 = HDTV 1035i<br>13 = HDTV 1080i<br>14 = HDTV 1080p<br>15 = HDTV 1080sF<br>16 = CPU VGA<br>17 = CPU 800x480<br>18 = CPU WVGA<br>19 = CPU SVGA<br>20 = CPU 1280x600<br>21 = CPU 720p RGB<br>22 = CPU XGA<br>23 = CPU WXGA<br>24 = CPU SWXGA<br>25 = CPU 800p RGB<br>26 = CPU SWXGA+<br>27 = CPU 1152x864<br>28 = CPU 900p RGB<br>29 = CPU 1600x900<br>30 = CPU 960p RGB<br>31 = CPU SXGA<br>32 = CPU 1360x1024<br>33 = CPU DILA4/3<br>34 = CPU SXGA+<br>35 = CPU WSXGA+<br>36 = CPU 1080p RGB<br>37 = CPU 2K<br>38 = CPU UXGA<br>39 = CPU WUXGA<br>40 = CPU 1920x1440<br>41 = CPU QXGA<br>42 = CPU 1366x768 | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |  |



| Group | Name               | Cmd | Resp | Description               | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |  |
|-------|--------------------|-----|------|---------------------------|--------------|-----------|-----------|---------------|---|---|----------|--|
|       | SIG_CURRENT_FORMAT | sF  | sF   | Input current format name | Rd           | 0         | 42        | 0             | 0 = None<br>1 = Invalid<br>2 = Unknown<br>3 = SDTV NTSC<br>4 = SDTV PAL<br>5 = SDTV SECAM<br>6 = SDTV BW<br>7 = SDTV 480i<br>8 = SDTV 576i<br>9 = EDTV 480p<br>10 = EDTV 576p<br>11 = HDTV 720p<br>12 = HDTV 1035i<br>13 = HDTV 1080i<br>14 = HDTV 1080p<br>15 = HDTV 1080sF<br>16 = CPU VGA<br>17 = CPU 800x480<br>18 = CPU WVGA<br>19 = CPU SVGA<br>20 = CPU 1280x600<br>21 = CPU 720p RGB<br>22 = CPU XGA<br>23 = CPU WXGA<br>24 = CPU SWXGA<br>25 = CPU 800p RGB<br>26 = CPU SWXGA+<br>27 = CPU 1152x864<br>28 = CPU 900p RGB<br>29 = CPU 1600x900<br>30 = CPU 960p RGB<br>31 = CPU SXGA<br>32 = CPU 1360x1024<br>33 = CPU DILA4/3<br>34 = CPU SXGA+<br>35 = CPU WSXGA+<br>36 = CPU 1080p RGB<br>37 = CPU 2K<br>38 = CPU UXGA<br>39 = CPU WUXGA<br>40 = CPU 1920x1440<br>41 = CPU QXGA<br>42 = CPU 1366x768 | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |  |



| Group | Name               | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2  |
|-------|--------------------|-----|------|---|--------------|-----------|-----------|---------------|---|---|---|
|       | SIG_FORMAT_LIST    | sL  | sL   | Bit field of the fomats compatible with the detected format | Rd           | 0         | 255       | 0             |   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 | 0 = Bits 0 to 7<br>Slice<br>1 = Bits 8 to 15<br>Slice<br>2 = Bits 16 to 23<br>Slice<br>3 = Bits 24 to 31<br>Slice<br>4 = Bits 32 to 39<br>Slice<br>5 = Bits 40 to 47<br>Slice |
|       | SIG_SCANTYPE       | ss  | ss   | Input scan type   | Rd           | 0         | 3         | 0             | 0 = Progressive<br>1 = Interleaved, Top field first<br>2 = Interleaved, Bottom field first<br>3 = Segmented frame | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |   |
|       | SIG_HTOTAL_THEORIC | sH  | sH   | Total number of pixels per line                             | Rd           | 0         | 65535     | 0             | Unit = pixels   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |   |



| Group | Name            | Cmd | Resp | Description                             | Read / Write | Min value | Max value | Default value | Values        | Index #1  | Index #2 |
|-------|-----------------|-----|------|---|--------------|-----------|-----------|---------------|---------------|---|----------|
|       | SIG_HTOTAL_MAXI | sM  | sM   | Maximal number of pixels per input line | Rd           | 0         | 65535     | 0             | Unit = pixels | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SIG_WIDTH       | sw  | sw   | Input displayed pixel count             | Rd           | 0         | 65535     | 0             | Unit = pixels | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SIG_HEIGHT      | st  | st   | Input displayed line count              | Rd           | 0         | 65535     | 0             | Unit = pixels | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group          | Name         | Cmd | Resp | Description               | Read / Write | Min value | Max value | Default value | Values         | Index #1  | Index #2 |
|----------------|--------------|-----|------|---------------------------|--------------|-----------|-----------|---------------|----------------|---|----------|
|                | SIG_HDCP     | sn  | sn   | Input HDCP status         | Rd           | 0         | 1         | 0             |                | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|                | SIG_MEM_SLOT | sS  | sS   | Memory slot index         | Rd           | 0         | 255       | 255           |                | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
| INPUT SETTINGS | SET_HPOS     | SH  | SH   | Input horizontal position | Rd/Wr        | 0         | 2048      | 1024          | 1024 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name      | Cmd | Resp | Description             | Read / Write | Min value | Max value | Default value | Values         | Index #1  | Index #2 |
|-------|-----------|-----|------|-------------------------|--------------|-----------|-----------|---------------|----------------|---|----------|
|       | SET_VPOS  | SV  | SV   | Input vertical position | Rd/Wr        | 0         | 2048      | 1024          | 1024 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_HSIZE | Sw  | Sw   | Input horizontal size   | Rd/Wr        | 0         | 4096      | 2048          | 2048 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_VSIZE | Sh  | Sh   | Input vertical size     | Rd/Wr        | 0         | 4096      | 2048          | 2048 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name           | Cmd | Resp | Description       | Read / Write | Min value | Max value | Default value | Values        | Index #1  | Index #2 |
|-------|----------------|-----|------|-------------------|--------------|-----------|-----------|---------------|---------------|---|----------|
|       | SET_BRIGHTNESS | Sg  | Sg   | Input brightness  | Rd/Wr        | 0         | 255       | 128           | 128 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_CONTRAST   | Sc  | Sc   | Input Contrast    | Rd/Wr        | 0         | 255       | 128           | 128 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_COLOR      | Sr  | Sr   | Input color level | Rd/Wr        | 0         | 255       | 128           | 128 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name       | Cmd | Resp | Description                | Read / Write | Min value | Max value | Default value | Values         | Index #1  | Index #2 |
|-------|------------|-----|------|----------------------------|--------------|-----------|-----------|---------------|----------------|---|----------|
|       | SET_HUE    | Su  | Su   | Input hue (NTSC only)      | Rd/Wr        | 0         | 255       | 128           | 128 = neutral  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_HTOTAL | ST  | ST   | Input total pixel per line | Rd/Wr        | 0         | 65535     | 0             | Unit = pixels. | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_PHASE  | SS  | SS   | Input Phase                | Rd/Wr        | 0         | 31        | 16            |                | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |





| Group | Name            | Cmd | Resp | Description                                 | Read / Write | Min value | Max value | Default value | Values        | Index #1  | Index #2 |
|-------|-----------------|-----|------|---|--------------|-----------|-----------|---------------|---------------|---|----------|
|       | SET_AUTOCAD     | Sa  | Sa   | Input autocentering reques                  | Rd/Wr        | 0         | 1         | 0             | Auto reset    | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_USER_GAIN_R | sr  | sr   | ADC R channel adjustment (advanced setting) | Rd/Wr        | 0         | 255       | 128           | 128 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_USER_GAIN_G | sg  | sg   | ADC G channel adjustment (advanced setting) | Rd/Wr        | 0         | 255       | 128           | 128 = neutral | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name             | Cmd | Resp | Description                                 | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|-------|------------------|-----|------|---|--------------|-----------|-----------|---------------|---|---|----------|
|       | SET_USER_GAIN_B  | sb  | sb   | ADC B channel adjustment (advanced setting) | Rd/Wr        | 0         | 255       | 128           | 128 = neutral   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_PULLDOWN_2_2 | Sn  | Sn   | Enable/disable the auto 2:2 pulldown        | Rd/Wr        | 0         | 1         | 1             | 0 = Disable automatic detection<br>1 = Enable automatic detection | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_PULLDOWN_3_2 | Sp  | Sp   | Enable/disable the auto 3:2 pulldown        | Rd/Wr        | 0         | 1         | 1             | 0 = Disable automatic detection<br>1 = Enable automatic detection | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name                | Cmd | Resp | Description                         | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|-------|---------------------|-----|------|-------------------------------------|--------------|-----------|-----------|---------------|---|---|----------|
|       | SET_CROP_WIN_POS_H  | SI  | SI   | Cropping window horizontal position | Rd/Wr        | 0         | 65535     | 32768         | Percent = 65535 = 100% : all cropping on the left | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_CROP_WIN_POS_V  | SJ  | SJ   | Cropping window vertical position   | Rd/Wr        | 0         | 65535     | 32768         | Percent = 65535 = 100% : all cropping on the top  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_CROP_WIN_SIZE_H | SK  | SK   | Horizontal cropping                 | Rd/Wr        | 0         | 58981     | 0             | Percent = 65535 = 100%                            | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name                 | Cmd | Resp | Description               | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|----------------------|-----|------|---------------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | SET_CROP_WIN_SIZE_V  | SL  | SL   | Vertical cropping         | Rd/Wr        | 0         | 58981     | 0             | Percent = 65535 = 100%   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_ASPECT_RATIO_IN  | si  | si   | Input image aspect ratio  | Rd/Wr        | 0         | 4         | 0             | 0 = 4/3 Fullscreen<br>1 = 4/3 with 16/9 content + black stripes<br>2 = 4/3 with 2.35 content + black stripes<br>3 = 4/3 with 16/9 content without black stripes<br>4 = 19/9 with 4/3 content + black stripes | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_ASPECT_RATIO_OUT | so  | so   | Output image aspect ratio | Rd/Wr        | 0         | 3         | 1             | 0 = Distorted, input aspect ratio not preserved<br>1 = Not distorted, black bands added<br>2 = Not distorted, no black bands added<br>3 = Not distorted and no scaling                                       | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group | Name               | Cmd | Resp | Description                                     | Read / Write | Min value | Max value | Default value | Values     | Index #1  | Index #2 |
|-------|--------------------|-----|------|---|--------------|-----------|-----------|---------------|------------|---|----------|
|       | SET_OVER_SCAN      | sO  | sO   | input image Overscan/Underscan                  | Rd/Wr        | 0         | 1         | 1             |            | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_FORCE_4_3      | SF  | SF   | Force the aspect ratio of PAL/NTSC input to 4/3 | Rd/Wr        | 0         | 1         | 1             | 1 = forced | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | SET_RESET_SETTINGS | Ss  | Ss   | Current input default settings                  | Rd/Wr        | 0         | 1         | 0             |            | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |



| Group          | Name              | Cmd | Resp | Description                                    | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2   |
|----------------|-------------------|-----|------|--|--------------|-----------|-----------|---------------|--|---|--|
|                | SET_FREEZE        | Sf  | Sf   | Freeze of the input                            | Rd/Wr        | 0         | 1         | 0             | 1 = Freeze   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |  |
|                | SET_MOTION_DETECT | Sm  | Sm   | 0 : max correction; 15 : min correction        | Rd/Wr        | 0         | 15        | 15            |  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |  |
| PRESET ELEMENT | PE_INPUTNUM       | IN  | IN   | Displayed input number or frame or logo number | Rd/Wr        | 0         | 12        | 0             | 0 = No input<br>1 = Input1<br>2 = Input2<br>3 = Input3<br>4 = Input4<br>5 = Input5<br>6 = Input6<br>7 = Input7<br>8 = Input8<br>9 = Input9<br>10 = Input10<br>11 = Input11<br>12 = Input12 | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4                  | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>Background Layer for output 2 in matrix mode<br>4 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name              | Cmd | Resp | Description                   | Read / Write | Min value | Max value | Default value | Values      | Index #1   | Index #2   |
|-------|-------------------|-----|------|-------------------------------|--------------|-----------|-----------|---------------|-------------|--|--|
|       | PE_SOURCENUM      | IS  | IS   | Source number                 | Rd/Wr        | 0         | 64        | 0             | Same Orc-50 | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_AUDIO_AUX_MUTE | Aa  | Aa   | Auxiliary input mixing enable | Rd/Wr        | 0         | 1         | 0             | 1 = Enable. | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name           | Cmd | Resp | Description                    | Read / Write | Min value | Max value | Default value | Values      | Index #1   | Index #2   |
|-------|----------------|-----|------|--------------------------------|--------------|-----------|-----------|---------------|-------------|--|--|
|       | PE_SMOOTH_MOVE | ps  | ps   | « Smooth Move » activation     | Rd/Wr        | 0         | 1         | 1             | 1 = Enable. | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_NEW_ID      | pN  | pN   | Unique layer identifier number | Rd/Wr        | 0         | 1         | 0             |             | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |





| Group | Name     | Cmd | Resp | Description                            | Read / Write | Min value | Max value | Default value | Values                                       | Index #1   | Index #2  |
|-------|----------|-----|------|--|--------------|-----------|-----------|---------------|--|--|---|
|       | PE_POS_H | pH  | pH   | Layer left H position on output screen | Rd/Wr        | 0         | 65535     | 32768         | Unit = pixels ( 32768 = screen left border ) | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Memory Preset 4 |
|       | PE_POS_V | pV  | pV   | Layer top V position on output screen  | Rd/Wr        | 0         | 65535     | 32768         | Unit = pixels ( 32768 = screen top border )  | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Memory Preset 4 |



| Group | Name      | Cmd | Resp | Description                                     | Read / Write | Min value | Max value | Default value | Values                               | Index #1   | Index #2  |
|-------|-----------|-----|------|---|--------------|-----------|-----------|---------------|--------------------------------------|--|---|
|       | PE_SIZE_H | pW  | pW   | Layer H size on output screen (without borders) | Rd/Wr        | 0         | 65535     | 1600          | Unit = pixels ( Max=16x2048 = 32768) | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Memory Preset 4 |
|       | PE_SIZE_V | pS  | pS   | Layer V size on output screen (without borders) | Rd/Wr        | 0         | 65535     | 1200          | Unit = pixels (Max=16x2048 = 32768)  | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Memory Preset 4 |



| Group | Name              | Cmd | Resp | Description                         | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2  |
|-------|-------------------|-----|------|-------------------------------------|--------------|-----------|-----------|---------------|--|--|---|
|       | PE_CROP_WIN_POS_H | CH  | CH   | Cropping window horizontal position | Rd/Wr        | 0         | 65535     | 32768         | Unit = percent ( 65535 = 100% = : all cropping on the left ) | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Layer for output 2 in matrix mode<br>5 = Memory for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_CROP_WIN_POS_V | CV  | CV   | Cropping window vertical position   | Rd/Wr        | 0         | 65535     | 32768         | Unit = percent ( 65535 = 100% = : all cropping on the top )  | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Layer for output 2 in matrix mode<br>5 = Memory for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name               | Cmd | Resp | Description         | Read / Write | Min value | Max value | Default value | Values                 | Index #1   | Index #2  |
|-------|--------------------|-----|------|---------------------|--------------|-----------|-----------|---------------|------------------------|--|---|
|       | PE_CROP_WIN_SIZE_H | CW  | CW   | Horizontal cropping | Rd/Wr        | 0         | 58981     | 0             | Percent = 65535 = 100% | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output 2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_CROP_WIN_SIZE_V | CS  | CS   | Vertical cropping   | Rd/Wr        | 0         | 58981     | 0             | Percent = 65535 = 100% | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output 2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name            | Cmd | Resp | Description        | Read / Write | Min value | Max value | Default value | Values                                       | Index #1   | Index #2   |
|-------|-----------------|-----|------|--------------------|--------------|-----------|-----------|---------------|--|--|--|
|       | PE_ALPHA        | pA  | pA   | Layer transparency | Rd/Wr        | 0         | 255       | 255           | 0 = 100% = transparent<br>255 = 0% = visible | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_BORDER_STYLE | bS  | bS   | Border style       | Rd/Wr        | 0         | 1         | 0             | 0 = No border<br>1 = Colored edge            | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name            | Cmd | Resp | Description         | Read / Write | Min value | Max value | Default value | Values                                       | Index #1   | Index #2   |
|-------|-----------------|-----|------|---------------------|--------------|-----------|-----------|---------------|--|--|--|
|       | PE_BORDER_COLOR | bC  | bC   | Border color        | Rd/Wr        | 0         | 544       | 33            | Color number                                 | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_BORDER_ALPHA | bA  | bA   | Border transparency | Rd/Wr        | 0         | 255       | 255           | 0 = 100% = transparent<br>255 = 0% = visible | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name             | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values        | Index #1   | Index #2  |
|-------|------------------|-----|------|---------------|--------------|-----------|-----------|---------------|---------------|--|---|
|       | PE_BORDER_SIZE_H | bH  | bH   | Border H size | Rd/Wr        | 0         | 127       | 10            | Unit = pixels | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output 2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_BORDER_SIZE_V | bV  | bV   | Border V size | Rd/Wr        | 0         | 127       | 10            | Unit = pixels | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output 2 in matrix mode<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |



| Group | Name                      | Cmd | Resp | Description                        | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2  |
|-------|---------------------------|-----|------|------------------------------------|--------------|-----------|-----------|---------------|--|--|---|
|       | PE_OPENING_TRANSITION     | oT  | oT   | Layer opening transition type      | Rd/Wr        | 0         | 4         | 2             | 0 = Cut<br>1 = CleanCut<br>2 = Fade<br>3 = Slide (associée à 1 trajectoire)<br>4 = Wipe (associée à 1 trajectoire)   | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1 Layer for output 2 in matrix mode<br>5 = Memory Preset 3 for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|       | PE_OPENING_TRANSITION_WAY | oW  | oW   | Layer opening transition direction | Rd/Wr        | 0         | 10        | 0             | 0 = Left to right<br>1 = Right to left<br>2 = Bottom to top<br>3 = Top to bottom<br>4 = Vertical from/to center<br>5 = Horizontal from/to center<br>6 = H&V rom/to center<br>7 = From SW to NE<br>8 = From SE to NW<br>9 = From NW to SE<br>10 = From NE to SW | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1 Layer for output 2 in matrix mode<br>5 = Memory Preset 3 for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |





| Group | Name                  | Cmd | Resp | Description                       | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2  |
|-------|-----------------------|-----|------|-----------------------------------|--------------|-----------|-----------|---------------|--|--|---|
|       | PE_OPENING_DURATION   | oD  | oD   | Layer opening transition duration | Rd/Wr        | 0         | 255       | 10            | Unit = 1/10s   | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Logo 1<br>8 = Logo 2<br>9 = Audio Output 1<br>10 = Audio Output 2 |
|       | PE_CLOSING_TRANSITION | cT  | cT   | Layer closing transition type     | Rd/Wr        | 0         | 4         | 2             | 0 = Cut<br>1 = CleanCut<br>2 = Fade<br>3 = Slide (associée à 1 trajectoire)<br>4 = Wipe (associée à 1 trajectoire) | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Memory Preset 1<br>5 = Memory Preset 2<br>6 = Memory Preset 3<br>7 = Logo 1<br>8 = Logo 2<br>9 = Audio Output 1<br>10 = Audio Output 2 |



| Group          | Name                      | Cmd | Resp | Description                        | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2  |
|----------------|---------------------------|-----|------|------------------------------------|--------------|-----------|-----------|---------------|--|--|---|
|                | PE_CLOSING_TRANSITION_WAY | cW  | cW   | Layer closing transition direction | Rd/Wr        | 0         | 10        | 0             | 0 = Left to right<br>1 = Right to left<br>2 = Bottom to top<br>3 = Top to bottom<br>4 = Vertical from/to center<br>5 = Horizontal from/to center<br>6 = H&V rom/to center<br>7 = From SW to NE<br>8 = From SE to NW<br>9 = From NW to SE<br>10 = From NE to SW | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output1<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
|                | PE_CLOSING_DURATION       | cD  | cD   | Layer closing transition duration  | Rd/Wr        | 0         | 255       | 10            | Unit = 1/10s   | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4 | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1 for output1<br>3 = Pip 1 Layer for output1<br>4 = Pip 2 Layer for output1<br>5 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |
| PRESET CONTROL | TAKE                      | TK  | TK   | TAKE, Next preset becomes Current  | Rd/Wr        | 0         | 1         | 0             |  |  |   |
|                | TAKEAVA                   | TA  | TA   | Available TAKE flag                | Rd           | 0         | 1         | 1             |  |  |   |



| Group | Name            | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values   | Index #1 | Index #2 |
|-------|-----------------|-----|------|---|--------------|-----------|-----------|---------------|--|----------|----------|
|       | TAKEINFO        | TI  | TI   | TAKE information  | Rd           | 0         | 2         | 0             | 0 = 1 shot TAKE<br>1 = 2 shot TAKE<br>2 = Sequenced TAKE   |          |          |
|       | TBAR            | NT  | NT   | TBAR value  | Rd/Wr        | 0         | 10000     | 0             | Unit = 0,01%   |          |          |
|       | COPY_FROM       | Nf  | Nf   | Source for preset copy                                    | Rd/Wr        | 0         | 6         | 0             | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4   |          |          |
|       | COPY_TO         | Nt  | Nt   | Destination for preset copy                               | Rd/Wr        | 0         | 6         | 0             | 0 = Current preset<br>1 = Next preset<br>2 = Previous preset<br>3 = Memory Preset 1<br>4 = Memory Preset 2<br>5 = Memory Preset 3<br>6 = Memory Preset 4   |          |          |
|       | COPY_SPLIT      | Ns  | Ns   | Preset partial copy control                               | Rd/Wr        | 0         | 2         | 0             | 0 = Full Preset copy<br>1 = Output1 preset copy<br>2 = Output2 preset copy   |          |          |
|       | COPY_CTRL       | Nc  | Nc   | Preset copy control                                       | Rd/Wr        | 0         | 1         | 0             | Auto reset   |          |          |
|       | PREVIEWED_LAYER | NC  | NC   | Previewed layed (layer that is visible on preview screen) | Rd/Wr        | 0         | 7         | 2             | 0 = Background Frame for output 1<br>1 = Background Frame for output 2 in matrix mode<br>2 = Background Layer for output 1<br>3 = Pip 1 Layer for output1<br>Background Layer for output 2 in matrix mode<br>4 = Pip 2 Layer for output1<br>6 = Logo 1<br>7 = Logo 2<br>8 = Audio Output 1<br>9 = Audio Output 2 |          |          |



| Group    | Name            | Cmd | Resp | Description                              | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|----------|-----------------|-----|------|--|--------------|-----------|-----------|---------------|--|---|----------|
|          | SET_QUAD_LAYOUT | NQ  | NQ   | Quadravision Layout request (auto-reset) | Rd/Wr        | 13        | 25        | 0             | 13 = Reset of layer properties<br>14 = Background Live + Top Left PiP<br>15 = Background Live + Top Right PiP<br>16 = Background Live + Bottom Left PiP<br>17 = Background Live + Bottom Right PiP<br>18 = Background Frame + 2 Left Right PiPs<br>19 = Background Frame + 2 Top Bottom PiPs<br>20 = Background Frame + 1 Right PiP + 2 Top Bottom PiPs<br>21 = Background Frame + 1 Left PiP + 2 Top Bottom PiPs<br>22 = Background Frame + 1 Top PiP + 2 Left Right PiPs<br>23 = Background Frame + 1 Bottom PiP + 2 Left Right PiPs<br>24 = Background Frame + 3 horizontal PiPs<br>25 = Background Frame + 3 diagonal PiPs |   |          |
| SETTINGS | R_FLICK         | Rf  | Rf   | Anti-flicker level                       | Rd/Wr        | 0         | 7         | 2             | 0 = No antiflicker   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|          | R_GAMMA         | Rg  | Rg   | Gamma correction level                   | Rd/Wr        | 5         | 40        | 10            | Unit = 1/10  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|          | R_SHARPNESS     | Rs  | Rs   | Sharpness correction Level               | Rd/Wr        | 0         | 255       | 128           | 128 = neutral  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |



| Group  | Name    | Cmd | Resp | Description   | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|--------|---------|-----|------|---------------|--------------|-----------|-----------|---------------|---|---|----------|
| OUTPUT | OFORMAT | OF  | OF   | Output format | Rd/Wr        | 0         | 37        | 0             | 0 = PAL<br>1 = NTSC<br>2 = 480p<br>3 = 576p<br>4 = SMPTE296M<br>5 = SMPTE260M<br>6 = SMPTE274M<br>7 = SMPTE274M<br>8 = SMPTE274M<br>9 = 640 x 480 4/3<br>10 = 848 x 480 16/9<br>11 = 800 x 600 4/3<br>12 = 1024 x 768 4/3<br>13 = 1360 x 768 16/9<br>14 = 1280 x 800 16/9<br>15 = 1280 x 1024 5/4<br>16 = 1400 x 1050 5/3<br>17 = 1680 x 1050 16/9<br>18 = 1600 x 1200 4/3<br>19 = 1920 x 1200 16/9<br>20 = 2048 x 1080<br>21 = 1280 x 720 16/9<br>22 = 1920 x 1080 16/9<br>23 = 1920 x 1080 16/9 (HD)<br>24 = 1920 x 1080 16/9 (SHARP)<br>25 = 1920 x 1080 16/9 (SHARP 2)<br>26 = 1440 x 900 16/10<br>27 = 1280 x 768 15/9<br>28 = 1366 x 800 15/9<br>29 = 1366 x 768 16/9<br>30 = Computer Custom 1<br>31 = Computer Custom 2<br>32 = Computer Custom 3<br>33 = Computer Custom 4<br>34 = Computer Custom 5<br>35 = Computer Custom 6<br>36 = Computer Custom 7<br>37 = Computer Custom 8 | 0 = Main output<br>1 = Preview<br>output<br>2 = Recording<br>output |          |



| Group | Name            | Cmd | Resp | Description                 | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|-----------------|-----|------|-----------------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | ORATE           | OR  | OR   | Output rate                 | Rd/Wr        | 0         | 12        | 8             | 0 = Custom Field Rate<br>1 = 23,97 Hz<br>2 = 24 Hz<br>3 = 25 Hz<br>4 = 29,97 Hz<br>5 = 30 Hz<br>6 = 50 Hz<br>7 = 59,94 Hz<br>8 = 60 Hz<br>9 = 72 Hz<br>10 = 75 Hz<br>11 = 85 Hz<br>12 = 100 Hz | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OSIGTYPEANALOG  | OA  | OA   | Analog output type          | Rd/Wr        | 0         | 3         | 0             | 0 = RGBs<br>1 = RGSB (SOG)<br>2 = RGB H&V<br>3 = YUV   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OSIGTYPEDIGITAL | OD  | OD   | Digital output type         | Rd/Wr        | 0         | 2         | 0             | 0 = RGB 0-255 ( full scale )<br>1 = RGB 16-235 ( reduced scale )<br>2 = YUV  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OSYNCPOL        | OS  | OS   | Analog output sync polarity | Rd/Wr        | 0         | 3         | 0             | 0 = negative H&V synchro<br>1 = Synchros H négative et V positive<br>2 = Synchros H positive et V négative<br>3 = Synchros H et V positives  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |



| Group | Name             | Cmd | Resp | Description                         | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|------------------|-----|------|-------------------------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | OBACKCOLORPREDEF | OC  | OC   | Output background pre-defined color | Rd/Wr        | 0         | 32        | 0             | 0 = Black<br>1 = Navy blue<br>2 = Blue<br>3 = Green Blue<br>4 = Water Blue<br>5 = Turquoise blue<br>6 = Dark green<br>7 = Green<br>8 = Lime<br>9 = Light green<br>10 = Dark red<br>11 = Red<br>12 = Tomato red<br>13 = Bordeaux<br>14 = Brown<br>15 = Chocolate<br>16 = Orange<br>17 = Gold<br>18 = Yellow<br>19 = Indigo blue<br>20 = Purple<br>21 = Light red<br>22 = Fuchsia<br>23 = Salmon<br>24 = Rose<br>25 = Olive reen<br>26 = Grey<br>27 = Silver<br>28 = Lavender blue<br>29 = Beige<br>30 = Azur<br>31 = White<br>32 = Custom | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OBACKCOLORHUE    | OG  | OG   | Output background hue               | Rd/Wr        | 0         | 240       | 160           |  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OBACKCOLORSAT    | OJ  | OJ   | Output background saturation        | Rd/Wr        | 0         | 240       | 0             |  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |



| Group | Name            | Cmd | Resp | Description                              | Read / Write | Min value | Max value | Default value | Values  | Index #1  | Index #2 |
|-------|-----------------|-----|------|--|--------------|-----------|-----------|---------------|---|---|----------|
|       | OBACKCOLORLUMA  | OI  | OI   | Output background brightness             | Rd/Wr        | 0         | 240       | 0             |   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OPATTERN        | OP  | OP   | Output test pattern                      | Rd/Wr        | 0         | 8         | 0             | 0 = No pattern<br>1 = Vertical Grey Scale<br>2 = Horizontal Grey Scale<br>3 = Vertical Color Bar<br>4 = Horizontal Color Bar<br>5 = Grid<br>6 = SMPTE<br>7 = Burst<br>8 = Centering | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OBLACK          | OB  | OB   | Output black control                     | Rd/Wr        | 0         | 1         | 0             | 0 = Normal output<br>1 = Black output   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OUTIL_H         | OH  | OH   | Output H size                            | Rd           | 0         | 65535     | 1600          | Unit = pixels   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OUTIL_V         | OV  | OV   | Output V size                            | Rd           | 0         | 65535     | 1200          | Unit = pixels   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OFIELDRATE      | OT  | OT   | Output frame frequency                   | Rd           | 100       | 10000     | 6000          | Unit = 1/100Hz  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OIMAGE_OVERSCAN | OO  | OO   | Image Overscan / Underscan               | Rd/Wr        | 0         | 1         | 0             |   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|       | OSETDETECTHDCP  | Oh  | Oh   | Enable/disable the Output HDCP detection | Rd/Wr        | 0         | 4         | 1             | 0 = Disable HDCP detection<br>1 = Automatic HDCP detection<br>2 = HDCP Configuration 1<br>3 = HDCP Configuration 2<br>4 = HDCP Configuration 3                                      | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |





| Group     | Name              | Cmd | Resp | Description                                     | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-----------|-------------------|-----|------|---|--------------|-----------|-----------|---------------|--|---|----------|
|           | OISHDCP           | On  | On   | Output HDCP status                              | Rd           | 0         | 1         | 0             |  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|           | OSYNCOOUTPUT      | Om  | Om   | Output 2 copies the format and rate of output 1 | Rd/Wr        | 0         | 1         | 0             |  |   |          |
| REFERENCE | REFREQUEST        | Xr  | Xr   | Frame lock source requested by user             | Rd/Wr        | 0         | 16        | 0             | 0 = Analog input 1 as reference<br>1 = Analog input 2 as reference<br>2 = Analog input 3 as reference<br>3 = Analog input 4 as reference<br>4 = Analog input 5 as reference<br>5 = Analog input 6 as reference<br>6 = Analog input 7 as reference<br>7 = Analog input 8 as reference<br>8 = DVI 1 input as reference<br>9 = DVI 2 input as reference<br>10 = SDI 1 input as reference<br>11 = SDI 2 input as reference<br>14 = Back End 1 as reference<br>15 = Back End 2 as reference<br>16 = Back End 3 as reference | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|           | REFCURRENTREQUEST | Xe  | Xe   | Current Frame Lock source                       | Rd/Wr        | 0         | 16        | 0             | 0 = Analog input 1 as reference<br>1 = Analog input 2 as reference<br>2 = Analog input 3 as reference<br>3 = Analog input 4 as reference<br>4 = Analog input 5 as reference<br>5 = Analog input 6 as reference<br>6 = Analog input 7 as reference<br>7 = Analog input 8 as reference<br>8 = DVI 1 input as reference<br>9 = DVI 2 input as reference<br>10 = SDI 1 input as reference<br>11 = SDI 2 input as reference<br>14 = Back End 1 as reference<br>15 = Back End 2 as reference<br>16 = Back End 3 as reference | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|           | REFMODE           | Xm  | Xm   | Follow mode requested by user                   | Rd/Wr        | 0         | 5         | 0             | 0 = Internal<br>1 = Follow x1/2<br>2 = Follow x1<br>3 = Follow x2<br>4 = Follow x3<br>5 = Asynchronous Follow  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |



| Group           | Name            | Cmd | Resp | Description                                     | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-----------------|-----------------|-----|------|---|--------------|-----------|-----------|---------------|--|---|----------|
|                 | REFCURRENTMODE  | Xc  | Xc   | Current follow mode                             | Rd/Wr        | 0         | 5         | 0             | 0 = Internal<br>1 = Follow x1/2<br>2 = Follow x1<br>3 = Follow x2<br>4 = Follow x3<br>5 = Asynchronous Follow  | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|                 | REFREQ          | Xt  | Xt   | Frame rate of the reference signal              | Rd           | 0         | 65535     | 0             | Unit = 1/100Hz   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
|                 | REFLOCKSTATUS   | XI  | XI   | Framelock locked status                         | Rd           | 0         | 1         | 0             | 1 = locked   | 0 = Main output<br>1 = Preview output<br>2 = Recording output |          |
| LOGOS<br>FRAMES | PMODE           | PM  | PM   | Picture mode                                    | Rd/Wr        | 0         | 5         | 0             | 0 = Normal mode<br>1 = Memory recall of logos and frames<br>2 = Logo recording mode<br>3 = Animated logo recording mode<br>4 = Frame recording mode<br>5 = Deleting picture mode |   |          |
|                 | PEXECUTE        | PG  | PG   | Picture control                                 | Rd/Wr        | 0         | 1         | 0             | If PMODE = Savexxx => Store the PCAPTURE_INDEX image<br>If PMODE = Erasexxx => Delete the PCAPTURE_INDEX image<br>Auto reset   |   |          |
|                 | PSTATUS         | PE  | PE   | Picture management status                       | Rd           | 0         | 5         | 0             | 0 = Free<br>1 = Recalling picture<br>2 = Storing picture<br>3 = Picture format not compliant with current output format<br>4 = Deleting a picture<br>5 = Flash access error      |   |          |
|                 | PFRAMES_VALID   | PF  | PF   | Frames validity (bitfield : bit0 = Frame1)      | Rd           | 0         | 255       | 0             | 0 = No image<br>1 = Image is valid   |   |          |
|                 | PLOGOS_VALID    | PZ  | PZ   | Logos validity (bitfield : bit0 = Logo1)        | Rd           | 0         | 511       | 0             | 0 = No image<br>1 = Image is valid   |   |          |
|                 | PCAPTURE_ORIGIN | PS  | PS   | Select the output that will be used for capture | Rd/Wr        | 0         | 1         | 0             | 0 = Main output<br>1 = Preview output<br>2 = Recording output  |   |          |
|                 | PCAPTURE_LEFT   | PL  | PL   | Picture capture H position                      | Rd/Wr        | 32768     | 65535     | 32768         | Unit = pixels  |   |          |
|                 | PCAPTURE_TOP    | PT  | PT   | Picture capture V position                      | Rd/Wr        | 32768     | 65535     | 32768         | Unit = pixels  |   |          |
|                 | PCAPTURE_WIDTH  | PW  | PW   | Picture capture H size                          | Rd/Wr        | 0         | 32767     | 400           | Unit = pixels  |   |          |
|                 | PCAPTURE_HEIGHT | PH  | PH   | Picture capture V size                          | Rd/Wr        | 0         | 32767     | 300           | Unit = pixels  |   |          |



| Group | Name                            | Cmd | Resp | Description                                  | Read / Write | Min value | Max value | Default value | Values  | Index #1 | Index #2 |
|-------|---------------------------------|-----|------|--|--------------|-----------|-----------|---------------|---|----------|----------|
|       | PCAPTURE_KEYING_TYPE            | PB  | PB   | Picture Keying Type                          | Rd/Wr        | 0         | 2         | 0             | 0 = No keying<br>1 = Luma Key Keying<br>2 = ChromaKey Keying<br>3 = Luma Key Keying + DSK<br>4 = ChromaKey Keying + DSK   |          |          |
|       | PCAPTURE_KEYING_R_LEVEL         | PC  | PC   | Picture Keying Level (Red or Tint)           | Rd/Wr        | 0         | 255       | 128           |   |          |          |
|       | PCAPTURE_KEYING_G_LEVEL         | PD  | PD   | Picture Keying Level (Green)                 | Rd/Wr        | 0         | 255       | 128           |   |          |          |
|       | PCAPTURE_KEYING_B_LEVEL         | PJ  | PJ   | Picture Keying Level (Blue)                  | Rd/Wr        | 0         | 255       | 128           |   |          |          |
|       | PCAPTURE_KEYING_TOLER           | PK  | PK   | Keing Tolerance                              | Rd/Wr        | 0         | 255       | 10            |   |          |          |
|       | PCAPTURE_KEYING_LUMA_LOW_LEVEL  | PP  | PP   | Minimum Luma Level                           | Rd/Wr        | 0         | 255       | 64            |   |          |          |
|       | PCAPTURE_KEYING_LUMA_HIGH_LEVEL | PY  | PY   | Maximum Luma Level                           | Rd/Wr        | 0         | 255       | 192           |   |          |          |
|       | PCAPTURE_KEYING_INVERT          | PO  | PO   | Keying Invert                                | Rd/Wr        | 0         | 1         | 0             |   |          |          |
|       | PCAPTURE_KEYING_GRAB_ENABLE     | PQ  | PQ   | Keying Grabber Activate                      | Rd/Wr        | 0         | 1         | 0             | 0 = Disable the grabber<br>1 = Enable the grabber   |          |          |
|       | PCAPTURE_KEYING_GRAB_GET        | PR  | PR   | Keying update (capture and apply new value)  | Rd/Wr        | 0         | 1         | 0             | Percent of OSCREEN_UTIL_H   |          |          |
|       | PCAPTURE_KEYING_GRAB_H          | PU  | PU   | Keying grabber position H                    | Rd/Wr        | 0         | 65535     | 32768         | Percent of OSCREEN_UTIL_V   |          |          |
|       | PCAPTURE_KEYING_GRAB_V          | PV  | PV   | Keying grabber position V                    | Rd/Wr        | 0         | 65535     | 32768         | Auto reset  |          |          |
|       | PCAPTURE_BACK_COLOR             | Pc  | Pc   | Cutout color for picture capture             | Rd/Wr        | 0         | 7         | 0             | 0 to 7  |          |          |
|       | PCAPTURE_CAPTURE_TIME           | Pt  | Pt   | Capture time for an animated logo            | Rd/Wr        | 0         | 100       | 0             | 0 = 0s<br>100 = 10s   |          |          |
|       | PCAPTURE_MAX_FRAME              | Pm  | Pm   | Maximal number of frames of an animated logo | Rd           | 1         | 255       | 80            | 1 à 255   |          |          |
|       | PCAPTURE_FRAME_COUNT            | PN  | PN   | Number of frames of an animated logo         | Rd/Wr        | 1         | 255       | 1             |   |          |          |
|       | PCAPTURE_REFRESH_INTERVAL       | PI  | PI   | Time between 2 frames of an animated logo    | Rd/Wr        | 1         | 10000     | 56            | Unit = 1ms  |          |          |
|       | PCAPTURE_INDEX                  | PX  | PX   | ID of the picture to capture                 | Rd/Wr        | 0         | 16        | 0             | 0 = No Picture<br>1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |          |          |



| Group | Name           | Cmd | Resp | Description    | Read / Write | Min value | Max value | Default value | Values | Index #1  | Index #2 |
|-------|----------------|-----|------|----------------|--------------|-----------|-----------|---------------|--------|---|----------|
|       | PSTATUS_WIDTH  | Pw  | Pw   | Picture H size | Rd           | 0         | 32767     | 0             |        | 1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |          |
|       | PSTATUS_HEIGHT | Ph  | Ph   | Picture V size | Rd           | 0         | 32767     | 0             |        | 1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |          |



| Group | Name                | Cmd | Resp | Description                          | Read / Write | Min value | Max value | Default value | Values                       | Index #1  | Index #2 |
|-------|---------------------|-----|------|--------------------------------------|--------------|-----------|-----------|---------------|------------------------------|---|----------|
|       | PSTATUS_STYLE       | Ps  | Ps   | Logo style                           | Rd           | 0         | 2         | 0             | 0 = Normal logo<br>2 = Frame | 1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |          |
|       | PSTATUS_FRAME_COUNT | Pn  | Pn   | Number of frames of an animated logo | Rd           | 1         | 255       | 1             |                              | 1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |          |



| Group | Name                     | Cmd | Resp | Description                               | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2  |
|-------|--------------------------|-----|------|---|--------------|-----------|-----------|---------------|--|---|---|
|       | PSTATUS_REFRESH_INTERVAL | Pi  | Pi   | Time between 2 frames of an animated logo | Rd/Wr        | 1         | 10000     | 56            | Unit = 1ms   | 1 = Logo 1<br>2 = Logo 2<br>3 = Logo 3<br>4 = Logo 4<br>5 = Logo 5<br>6 = Logo 6<br>7 = Logo 7<br>8 = Logo 8<br>9 = Frame 1<br>10 = Frame 2<br>11 = Frame 3<br>12 = Frame 4<br>13 = Frame 5<br>14 = Frame 6<br>15 = Frame 7<br>16 = Frame 8 |   |
| LAN   | LANENABLE                | ne  | ne   | LAN enable                                | Rd/Wr        | 0         | 1         | 0             | 0 = Enable RS232 ( disable LAN )<br>1 = Enable LAN ( disable RS232 ) |   |   |
|       | LANRESET                 | nr  | nr   | LAN factory parameters reset              | Rd/Wr        | 0         | 1         | 0             | Auto reset   |   |   |
|       | LANSTORE                 | ns  | ns   | LAN parameters update                     | Rd/Wr        | 0         | 1         | 0             | Auto reset   |   |   |
|       | LANIP                    | nw  | nw   | LAN devices addresses                     | Rd/Wr        | 0         | 255       | 192           | IP : 0 to 255  | 0 = Device<br>1 = Remote<br>2 = Gateway   | 0 = IP address high byte<br>1 = IP address mid high byte<br>2 = IP address mid low high byte<br>3 = IP address low byte |
|       | LANPORT                  | np  | np   | LAN port numbers                          | Rd/Wr        | 0         | 65535     | 10500         | Local port : 10000 à 10999<br>Remote port : 0 à 65500                | 0 = Device<br>1 = Remote<br>2 = Gateway   |   |
|       | LANNETMASK               | nk  | nk   | LAN netmask                               | Rd/Wr        | 0         | 24        | 8             | Number of 0bits from the right                                       |   |   |
|       | LANPROTOCOL              | nt  | nt   | LAN protocol                              | Rd/Wr        | 0         | 1         | 1             | 0 = UDP Protocol<br>1 = TCP protocol<br>2 = AMX Protocol             |   |   |



| Group | Name             | Cmd | Resp | Description                    | Read / Write | Min value | Max value | Default value | Values  | Index #1   | Index #2 |
|-------|------------------|-----|------|--------------------------------|--------------|-----------|-----------|---------------|---|--|----------|
| EDID  | EDID_FORMAT      | EF  | EF   | EDID preferred format          | Rd/Wr        | 0         | 21        | 0             | 0 = VGA<br>1 = 800x480<br>2 = WVGA<br>3 = SVGA<br>4 = 720pRGB<br>5 = XGA<br>6 = WXGA<br>7 = SWXGA<br>8 = 800pRGB<br>9 = 1152x864<br>10 = 900pRGB<br>11 = 1600x900<br>12 = 960pRGB<br>13 = SXGA<br>14 = 1360x1024<br>15 = SXGA+<br>16 = WSXGA+<br>17 = 1080pRGB<br>18 = 2K<br>19 = UXGA<br>20 = WUXGA<br>21 = Custom | 0 = Analog input<br>1<br>1 = Analog input<br>2<br>2 = Analog input<br>3 = DVI-D input 1<br>4 = DVI-D input 2 |          |
|       | EDID_RATE        | ER  | ER   | EDID preferred frame frequency | Rd/Wr        | 0         | 5         | 0             | 0 = 50 Hz<br>1 = 60 Hz<br>2 = 72 Hz<br>3 = 75 Hz<br>4 = 85 Hz<br>5 = Custom   | 0 = Analog input<br>1<br>1 = Analog input<br>2<br>2 = Analog input<br>3 = DVI-D input 1<br>4 = DVI-D input 2 |          |
|       | EDID_REQUEST     | ES  | ES   | Request for an EDID            | Rd/Wr        | 0         | 2         | 0             | 0 = EDID is ready<br>1 = EDID saving<br>2 = EDID reading  | 0 = Analog input<br>1<br>1 = Analog input<br>2<br>2 = Analog input<br>3 = DVI-D input 1<br>4 = DVI-D input 2 |          |
| AUDIO | AUDIO_INPUT_MODE | Af  | Af   | Audio mode                     | Rd/Wr        | 0         | 1         | 1             | 0 = Free choice of audio input<br>1 = Audio input follow the top layers   |  |          |



| Group | Name                | Cmd | Resp | Description                   | Read / Write | Min value | Max value | Default value | Values   | Index #1  | Index #2 |
|-------|---------------------|-----|------|-------------------------------|--------------|-----------|-----------|---------------|--|---|----------|
|       | AUDIO_INPUT_MAP     | Ai  | Ai   | Audio input map               | Rd/Wr        | 0         | 12        | 1             | 0 = No input<br>1 = Input1<br>2 = Input2<br>3 = Input3<br>4 = Input4<br>5 = Input5<br>6 = Input6<br>7 = Input7<br>8 = Input8<br>9 = Input9<br>10 = Input10<br>11 = Input11<br>12 = Input12 | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | AUDIO_LEVEL         | AL  | AL   | Audio input level             | Rd/Wr        | 0         | 255       | 45            | Linear scale, init value is 0 dB   | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | AUDIO_AUX_LEVEL     | AI  | AI   | Audio auxiliary input level   | Rd/Wr        | 0         | 255       | 45            | Linear scale, init value is 0 dB   |   |          |
|       | AUDIO_BALANCE       | Ab  | Ab   | Audio input balance           | Rd/Wr        | 0         | 90        | 45            | 0 = max to the left, 45 = centered, 90 = max to the right  | 0 = Input1<br>1 = Input2<br>2 = Input3<br>3 = Input4<br>4 = Input5<br>5 = Input6<br>6 = Input7<br>7 = Input8<br>8 = Input9<br>9 = Input10<br>10 = Input11<br>11 = Input12 |          |
|       | AUDIO_AUX_BALANCE   | AB  | AB   | Audio auxiliary input balance | Rd/Wr        | 0         | 90        | 45            | 0 = max to the left, 45 = centered, 90 = max to the right  |   |          |
|       | AUDIO_MUTE          | Au  | Au   | Audio output Mute control     | Rd/Wr        | 0         | 1         | 0             | 1 = Mute.  | 0 = Main output<br>1 = Preview output   |          |
|       | AUDIO_MASTER_VOLUME | AV  | AV   | Output Master volume          | Rd/Wr        | 0         | 255       | 255           | 0 = mute, 32 = -18dB , 255 = 0dB   | 0 = Main output<br>1 = Preview output   |          |





| Group | Name                 | Cmd | Resp | Description  | Read / Write | Min value | Max value | Default value | Values   | Index #1   | Index #2 |
|-------|----------------------|-----|------|--|--------------|-----------|-----------|---------------|--|--|----------|
|       | AUDIO_MODE           | Am  | Am   | Audio stero mode                                     | Rd/Wr        | 0         | 1         | 1             | 0 = mono<br>1 = Stereo   | 0 = Main output<br>1 = Preview output  |          |
|       | AUDIO_DELAY          | AD  | AD   | Delay between audio and video                        | Rd/Wr        | 0         | 80        | 0             | 0 = no delay<br>500ms = max delay  | 0 = Main output<br>1 = Preview output  |          |
|       | AUDIO_AUTO_DELAY     | Ae  | Ae   | Automatic audio delay                                | Rd/Wr        | 0         | 1         | 1             | 0 = réglage manuel du Delay, 1 = réglage automatique du delay  |  |          |
|       | AUDIO_SDI_CHAN_LEFT  | Ac  | Ac   | ID of the Sdi channel to desembled for left channel  | Rd/Wr        | 0         | 15        | 0             | 0 = Group A – Channel 1<br>1 = Group A – Channel 2<br>2 = Group A – Channel 3<br>3 = Group A – Channel 4<br>4 = Group B – Channel 1<br>5 = Group B – Channel 2<br>6 = Group B – Channel 3<br>7 = Group B – Channel 4<br>8 = Group C – Channel 1<br>9 = Group C – Channel 2<br>10 = Group C – Channel 3<br>11 = Group C – Channel 4<br>12 = Group D – Channel 1<br>13 = Group D – Channel 2<br>14 = Group D – Channel 3<br>15 = Group D – Channel 4 | 10 = Channel 11 – SDI 1<br>11 = Channel 11 – SDI 2<br>12 = Channel 11 – SDI 3<br>13 = Channel 12 – SDI 4 |          |
|       | AUDIO_SDI_CHAN_RIGHT | AC  | AC   | ID of the Sdi channel to desembled for right channel | Rd/Wr        | 0         | 15        | 1             | 0 = Group A – Channel 1<br>1 = Group A – Channel 2<br>2 = Group A – Channel 3<br>3 = Group A – Channel 4<br>4 = Group B – Channel 1<br>5 = Group B – Channel 2<br>6 = Group B – Channel 3<br>7 = Group B – Channel 4<br>8 = Group C – Channel 1<br>9 = Group C – Channel 2<br>10 = Group C – Channel 3<br>11 = Group C – Channel 4<br>12 = Group D – Channel 1<br>13 = Group D – Channel 2<br>14 = Group D – Channel 3<br>15 = Group D – Channel 4 | 10 = Channel 11 – SDI 1<br>11 = Channel 11 – SDI 2<br>12 = Channel 11 – SDI 3<br>13 = Channel 12 – SDI 4 |          |



| Group     | Name                          | Cmd | Resp | Description  | Read / Write | Min value | Max value | Default value | Values                       | Index #1   | Index #2 |
|-----------|-------------------------------|-----|------|--|--------------|-----------|-----------|---------------|------------------------------|--|----------|
|           | AUDIO_DESEMBEND_LOCKED        | As  | As   | Information of audio channel presence for SDI inputs | Rd           | 0         | 1         | 1             | 1 : Locked                   | 10 = Channel 11 - SDI 1<br>11 = Channel 11 - SDI 2<br>12 = Channel 11 - SDI 3<br>13 = Channel 12 - SDI 4 |          |
| RECORDING | RECORDING_MODE                | Rm  | Rm   | Video Output display mode                            | Rd/Wr        | 0         | 1         | 0             | 0 = Output 1<br>1 = Output 2 |  |          |
|           | RECORDING_IMAGE_ADJUST_POS_H  | RI  | RI   | Horizontal position adjust                           | Rd/Wr        | 0         | 255       | 128           | 128 = neutral                |  |          |
|           | RECORDING_IMAGE_ADJUST_POS_V  | Rt  | Rt   | Vertical position adjust                             | Rd/Wr        | 0         | 255       | 128           | 128 = neutral                |  |          |
|           | RECORDING_IMAGE_ADJUST_SIZE_H | Rw  | Rw   | Width adjust   | Rd/Wr        | 0         | 255       | 128           | 128 = neutral                |  |          |
|           | RECORDING_IMAGE_ADJUST_SIZE_V | Rh  | Rh   | Height adjust  | Rd/Wr        | 0         | 255       | 128           | 128 = neutral                |  |          |

