ANALOG WAY ®

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Programmer's Guide
For STE200

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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 sends 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 refered 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 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

2) 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

3) 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.

4) 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.
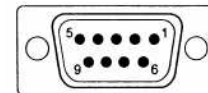Some commands are colored in yellow as this line to indicate they were added or modified in this version.

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.

- **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):

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

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	Index #3
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 1 = Ready			
	DEV	?	DEV	MMS device type	Rd	94	94	94	94 = STE_200			
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 progess. Do not power off	Rd	0	1	0	0 = Free 1 = Flash writing in progress			
	LOCK	YK	YK	Device locking	Rd/Wr	0	2	0	0 = No lock 1 = Locked menu 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 1 = Auto centering 2 = Auto setting 3 = StandBy 4 = Picture recording 5 = Reset to default factory setting 6 = Reset User settings			
	COPPROGRESS	CP	CP	Progress percent of the slow operation	Rd	0	100	0	Percent : 0 to 100%			
	SWITCHER_MODE	CM	CM	Device operating mode	Rd/Wr	1	1	0	1 = Matrix mode			
	AXION	yA	yA	Device is driven by Orchestra	Rd/Wr	0	1	0	0 = Device is not driven by ORC-50 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 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 1 = AUTO-TAKE Enable			
	AUTO_STEPBACK	Ys	Ys	Automatic preset toggle after a TAKE	Rd/Wr	0	1	0	0 = AUTO- PRESET-TOGGLE Disable 1 = AUTO- PRESET-TOGGLE Enable			
	FREEZE_MODE	Ym	Ym	Input freeze mode	Rd/Wr	0	1	0	0 = Freeze by input 1 = Freeze all inputs			

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	FRAME_ALERT	Yf	Yf	Back-up input when an input loose its signal	Rd/Wr	0	14	0	0 = No input 1 = Input1 2 = Input2 3 = Input3 4 = Input4 5 = Input5 6 = Input6 9 = Input9 10 = Input10 11 = Input11 12 = Input12 13 = Input13 14 = Input14			
	TRANSPARENT_BACKGROUND	Yt	Yt	Disable the the black fiilng of the bakgrounfd live layer	Rd/Wr	0	1	1	0 = use BLACK_FILL 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 1 = Enable black filling			
	DISABLE_ID	bI	bI	Disable Frame and Ids on the preview output	Rd/Wr	0	1	0				
STANDBY	STDBYSTATUS	wS	wS	Standby mode	Rd/Wr	0	1	0	0 = Normal mode 1 = Standby mode			
	STDBYREQUEST	wQ	wQ	Request for standby or wake up	Rd/Wr	0	1	0	0 = Wake up 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 1 = 2400bauds 2 = 9600bauds 3 = 19200bauds			
	STDBYPROJ_CTRL	wC	wC		Rd/Wr	0	4	0	0 = No request 1 = Wake up request 2 = Standby request 3 = Clear Wake up message 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			
	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			

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	VERK	xK	xK	Checksum/version of the programmable components	Rd/Wr	0	65535	0		0 = Number of programmables components 1 = Main micro-controler 2 = Front panel micro-controler 3 = FPGA Caecina 4 = FPGA Fannia 5 = FPGA Thrasea 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 bit 1 = SDI In 1 board (SDI 1 and 2) bit 2 = Recording board bit 3 = CF Caecina bit 4 = CF Fannia bit 5 = CF Thrasea bit 6 = SDI In 2 board (SDI 3 and 4) bit 7 = Audio Evolution bit 8 = HDCP DVI In Evolution			
	REV	xR	xR	Moher board revision	Rd	0	255	0				
INPUT	IN_AUTOSET_ALL	Ia	Ia	Auto-setting request for all the inputs	Rd/Wr	0	1	0				
	IN_AUTOSET	Ii	Ii	Auto-setting request for the specified input	Rd/Wr	0	1	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_USR_FORMAT	iU	iU	Format/standard of the input signal corrected by user	Rd/Wr	0	42	0	0 = None 1 = Invalid 2 = Unknown 3 = SDTV NTSC 4 = SDTV PAL 5 = SDTV SECAM 6 = SDTV BW 7 = SDTV 480i 8 = SDTV 576i 9 = EDTV 480p 10 = EDTV 576p 11 = HDTV 720p 12 = HDTV 1035i 13 = HDTV 1080i 14 = HDTV 1080p 15 = HDTV 1080sF 16 = CPU VGA 17 = CPU 800x480 18 = CPU WVGA 19 = CPU SVGA 20 = CPU 1280x600 21 = CPU 720p RGB 22 = CPU XGA 23 = CPU WXGA 24 = CPU SWXGA 25 = CPU 800p RGB 26 = CPU SWXGA+ 27 = CPU 1152x864 28 = CPU 900p RGB 29 = CPU 1600x900 30 = CPU 960p RGB 31 = CPU SXGA 32 = CPU 1360x1024 33 = CPU DILA4/3 34 = CPU SXGA+ 35 = CPU WSXGA+ 36 = CPU 1080p RGB 37 = CPU 2K 38 = CPU UXGA 39 = CPU WUXGA 40 = CPU 1920x1440 41 = CPU QXGA 42 = CPU 1366x768	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_TYPE	iK	iK	Input signal type	Rd/Wr	0	17	13	0 = SDTV Composite 1 = SDTV Y/C 2 = SDTV/EDTV/HDTV RGBS TTL/Analog 3 = SDTV/EDTV/HDTV RGB SOG 4 = SDTV/EDTV/HDTV YUV 5 = Computer SOG 6 = Computer H&V or Composite (TTL/Analog) 7 = Computer B&W 8 = DVI-D EDTV/HDTV RGB 16-235 9 = DVI-D EDTV/HDTV YUV 10 = DVI-D Computer RGB 0-255 11 = DVI-D Computer RGB 16-235 12 = SDI SDTV/HDTV 13 = Analog Computer, separated H&V synchro 14 = Analog Computer, composite TTL synchro 15 = Analog Computer, composite analog synchro 16 = Analog RGB video, composite TTL synchro 17 = Analog RGB video, composite analog synchro	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_SYNC_LOAD	il	il	Analog H sync load	Rd/Wr	0	1	0	0 = Hi-Z 1 = 75 ohm loaded	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_USED	iu	iu	Input is enabled	Rd/Wr	0	1	1		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_SD_STD	iS	iS	Decoded video standard	Rd/Wr	0	7	0	0 = Auto 1 = NTSC (M,J) 2 = PAL (BDGHIN) 3 = PAL (M) 4 = PAL (N-Combination) 5 = NTSC 4.43 6 = SECAM 7 = PAL 60	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_SD_STA	iV	iV	Video Signal stability	Rd/Wr	0	1	1	0 = Stable Source (DVD) 1 = VCR Source (Video cassette recorder)	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_SYNCHRONIZED	iY	iY	VIS Synchronisation group	Rd/Wr	0	3	0	0 = Does not belong to any VIS Group 1 = Groupe VIS 1 group for analog input 2 = Groupe VIS 2 group for analog input 3 = Groupe VIS 3 group for analog input	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_HDCP_ENABLE	iH	iH	Enable/disable the HDCP support of a DVI input	Rd/Wr	0	1	1		10 = Input11 11 = Input12		
	IN_HDCP_CABLE_LEN	iC	iC	Lenght of an DVI input cable	Rd/Wr	0	2	0	0 = Less than 10 meter cable length 1 = 5 to 20 meters cable length 2 = More than 15 meters cable length	10 = Input11 11 = Input12		
KEYING	IN_KEYING_TYPE	KT	KT	Keying type	Rd/Wr	0	4	0	0 = No keying 1 = Luma Key Keying 2 = ChromaKey Keying 3 = Luma Key Keying + DSK 4 = ChromaKey Keying + DSK	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_R_LEVEL	KR	KR	Keying level (Red)	Rd/Wr	0	255	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_KEYING_G_LEVEL	KG	KG	Keying level (Green)	Rd/Wr	0	255	255		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_B_LEVEL	KB	KB	Keying level (Bule)	Rd/Wr	0	255	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_TOLER	KH	KH	Keying Tolerance (for chroma and luma key)	Rd/Wr	0	255	10		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_KEYING_LUMA_LOW_LEVEL	KL	KL	Minimum luma level	Rd/Wr	0	255	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_LUMA_HIGH_LEVEL	KM	KM	Maximum luma level	Rd/Wr	0	255	255		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_DSK_ALPHA	KA	KA	Brightness of DSK background	Rd/Wr	0	255	64		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	IN_KEYING_INVERT	KI	KI	Invert keying area	Rd/Wr	0	1	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	IN_KEYING_GRAB_ENABLE	Kg	Kg	Enable/disable the keying color grabber mode	Rd/Wr	0	1	0	0 = Disable the grabber 1 = Enable the grabber			
	IN_KEYING_GRAB_GET	Kc	Kc	Capture the coolor 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	Precent 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 1 = Positive Synchro	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_VPOL	sv	sv	Input V sync polarity	Rd	0	1	0	0 = Negative Synchro 1 = Positive Synchro	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_SYNC_TYPE	sK	sK	Input sync type	Rd	0	3	0	0 = Séparated Synchros H&V 1 = Composite TTL Synchro 2 = Composite Analog Synchro 3 = Synchro on Green (SOG)	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_FREQ_FIELD	sf	sf	Input frame frequency	Rd	0	65535	0	Unit = 1/100Hz	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_FREQ_LINE	sl	sl	Input line frequency	Rd	0	65535	0	Unit = 1/100Hz	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_COMPLETE	sc	sc	Input scan completed	Rd	0	1	0	0 = scan in progress or failed 1 = scan completed	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_DETECTED_FORMAT	sD	sD	Input detected format name	Rd	0	42	0	0 = None 1 = Invalid 2 = Unknown 3 = SDTV NTSC 4 = SDTV PAL 5 = SDTV SECAM 6 = SDTV BW 7 = SDTV 480i 8 = SDTV 576i 9 = EDTV 480p 10 = EDTV 576p 11 = HDTV 720p 12 = HDTV 1035i 13 = HDTV 1080i 14 = HDTV 1080p 15 = HDTV 1080sF 16 = CPU VGA 17 = CPU 800x480 18 = CPU WVGA 19 = CPU SVGA 20 = CPU 1280x600 21 = CPU 720p RGB 22 = CPU XGA 23 = CPU WXGA 24 = CPU SWXGA 25 = CPU 800p RGB 26 = CPU SWXGA+ 27 = CPU 1152x864 28 = CPU 900p RGB 29 = CPU 1600x900 30 = CPU 960p RGB 31 = CPU SXGA 32 = CPU 1360x1024 33 = CPU DILA4/3 34 = CPU SXGA+ 35 = CPU WSXGA+ 36 = CPU 1080p RGB 37 = CPU 2K 38 = CPU UXGA 39 = CPU WUXGA 40 = CPU 1920x1440 41 = CPU QXGA 42 = CPU 1366x768	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read /Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_CURRENT_FORMAT	sF	sF	Input current format name	Rd	0	42	0	0 = None 1 = Invalid 2 = Unknown 3 = SDTV NTSC 4 = SDTV PAL 5 = SDTV SECAM 6 = SDTV BW 7 = SDTV 480i 8 = SDTV 576i 9 = EDTV 480p 10 = EDTV 576p 11 = HDTV 720p 12 = HDTV 1035i 13 = HDTV 1080i 14 = HDTV 1080p 15 = HDTV 1080sF 16 = CPU VGA 17 = CPU 800x480 18 = CPU WVGA 19 = CPU SVGA 20 = CPU 1280x600 21 = CPU 720p RGB 22 = CPU XGA 23 = CPU WXGA 24 = CPU SWXGA 25 = CPU 800p RGB 26 = CPU SWXGA+ 27 = CPU 1152x864 28 = CPU 900p RGB 29 = CPU 1600x900 30 = CPU 960p RGB 31 = CPU SXGA 32 = CPU 1360x1024 33 = CPU DILA4/3 34 = CPU SXGA+ 35 = CPU WSXGA+ 36 = CPU 1080p RGB 37 = CPU 2K 38 = CPU UXGA 39 = CPU WUXGA 40 = CPU 1920x1440 41 = CPU QXGA 42 = CPU 1366x768	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_FORMAT_LIST	sL	sL	Bit field of the fomats compatible with the detected format	Rd	0	255	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14	0 = Bits 0 to 7 Slice 1 = Bits 8 to 15 Slice 2 = Bits 16 to 23 Slice 3 = Bits 24 to 31 Slice 4 = Bits 32 to 39 Slice 5 = Bits 40 to 47 Slice	
	SIG_SCANTYPE	ss	ss	Input scan type	Rd	0	3	0	0 = Progressive 1 = Interleaved, Top field first 2 = Interleaved, Bottom field first 3 = Segmented frame	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_HTOTAL_THEORIC	sH	sH	Total number of pixels per line	Rd	0	65535	0	Unit = pixels	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_HTOTAL_MAXI	sM	sM	Maximal number of pixels per input line	Rd	0	65535	0	Unit = pixels	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_WIDTH	sw	sw	Input displayed pixel count	Rd	0	65535	0	Unit = pixels	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_HEIGHT	st	st	Input displayed line count	Rd	0	65535	0	Unit = pixels	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SIG_HDCP	sn	sn	Input HDCP status	Rd	0	1	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SIG_MEM_SLOT	sS	sS	Memory slot index	Rd	0	255	255		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
INPUT SETTINGS	SET_HPOS	SH	SH	Input horizontal position	Rd/Wr	0	2048	1024	1024 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_VPOS	SV	SV	Input vertical position	Rd/Wr	0	2048	1024	1024 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_HSIZE	Sw	Sw	Input horizontal size	Rd/Wr	0	4096	2048	2048 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_VSIZE	Sh	Sh	Input vertical size	Rd/Wr	0	4096	2048	2048 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_BRIGHTNESS	Sg	Sg	Input brightness	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_CONTRAST	Sc	Sc	Input Contrast	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_COLOR	Sr	Sr	Input color level	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_HUE	Su	Su	Input hue (NTSC only)	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_HTOTAL	ST	ST	Input total pixel per line	Rd/Wr	0	65535	0	Unit = pixels.	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_PHASE	SS	SS	Input Phase	Rd/Wr	0	31	16		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_AUTOCAD	Sa	Sa	Input autocentering reques	Rd/Wr	0	1	0	Auto reset	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_USER_GAIN_R	sr	sr	ADC R channel adjustment (advanced setting)	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_USER_GAIN_G	sg	sg	ADC G channel adjustment (advanced setting)	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_USER_GAIN_B	sb	sb	ADC B channel adjustment (advanced setting)	Rd/Wr	0	255	128	128 = neutral	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_PULLDOWN_2_2	Sn	Sn	Enable/disable the auto 2:2 pulldown	Rd/Wr	0	1	1	0 = Disable automatic detection 1 = Enable automatic detection	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_PULLDOWN_3_2	Sp	Sp	Enable/disable the auto 3:2 pulldown	Rd/Wr	0	1	1	0 = Disable automatic detection 1 = Enable automatic detection	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	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 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	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 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_CROP_WIN_SIZE_H	SK	SK	Horizontal cropping	Rd/Wr	0	58981	0	Percent = 65535 = 100%	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_CROP_WIN_SIZE_V	SL	SL	Vertical cropping	Rd/Wr	0	58981	0	Percent = 65535 = 100%	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_ASPECT_RATIO_IN	si	si	Input image aspect ratio	Rd/Wr	0	4	0	0 = 4/3 Fullscreen 1 = 4/3 with 16/9 content + black stripes 2 = 4/3 with 2.35 content + black stripes 3 = 4/3 with 16/9 content without black stripes 4 = 19/9 with 4/3 content + black stripes	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_ASPECT_RATIO_OUT	so	so	Output image aspect ratio	Rd/Wr	0	3	1	0 = Distorted, input aspect ratio not preserved 1 = Not distorted, black bands added 2 = Not distorted, no black bands added 3 = Not distorted and no scaling	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_OVER_SCAN	sO	sO	input image Overscan/Underscan	Rd/Wr	0	1	1		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	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 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_RESET_SETTINGS	Ss	Ss	Current input default settings	Rd/Wr	0	1	0		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	SET_FREEZE	Sf	Sf	Freeze of the input	Rd/Wr	0	1	0	1 = Freeze	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	SET_MOTION_DETECT	Sm	Sm	0 : max correction; 15 : min correction	Rd/Wr	0	15	15		0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
PRESET ELEMENT	PE_INPUTNUM	IN	IN	Displayed input number or frame or logo number	Rd/Wr	0	14	0	0 = No input 1 = Input1 2 = Input2 3 = Input3 4 = Input4 5 = Input5 6 = Input6 9 = Input9 10 = Input10 11 = Input11 12 = Input12 13 = Input13 14 = Input14	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame 2 = Background Layer 3 = Pip 1 Layer 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_SOURCENUM	IS	IS	Source number	Rd/Wr	0	64	0	Same Orc-50	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_AUDIO_AUX_MUTE	Aa	Aa	Auxiliary input mixing enable	Rd/Wr	0	1	0	1 = Enable.	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_SMOOTH_MOVE	ps	ps	« Smooth Move » activation	Rd/Wr	0	1	1	1 = Enable.	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_FLIP	pf	pf	Flip de la source	Rd/Wr	0	3	0	0 = No flip 1 = Horizontal flip 2 = Vertical flip 3 = Both Horizontal and vertical flip	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_NEW_ID	pN	pN	Unique layer identifier number	Rd/Wr	0	1	0		0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	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 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_CROP_WIN_SIZE_H	CW	CW	Horizontal cropping	Rd/Wr	0	58981	0	Percent = 65535 = 100%	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_CROP_WIN_SIZE_V	CS	CS	Vertical cropping	Rd/Wr	0	58981	0	Percent = 65535 = 100%	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_ALPHA	pA	pA	Layer transparency	Rd/Wr	0	255	255	0 = 100% = transparent 255 = 0% = visible	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_BORDER_STYLE	bS	bS	Border style	Rd/Wr	0	1	0	0 = No border 1 = Colored edge	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_BORDER_COLOR	bC	bC	Border color	Rd/Wr	0	544	33	Color number	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_BORDER_ALPHA	bA	bA	Border transparency	Rd/Wr	0	255	255	0 = 100% = transparent 255 = 0% = visible	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_BORDER_SIZE_H	bH	bH	Border H size	Rd/Wr	0	127	10	Unit = pixels	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read /Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_BORDER_SIZE_V	bV	bV	Border V size	Rd/Wr	0	127	10	Unit = pixels	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_OPENING_TRANSITION	oT	oT	Layer opening transition type	Rd/Wr	0	4	2	0 = Cut 1 = CleanCut 2 = Fade 3 = Slide (associée à 1 trajectoire) 4 = Wipe (associée à 1 trajectoire)	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_OPENING_TRANSITION_WAY	oW	oW	Layer opening transition direction	Rd/Wr	0	10	0	0 = Left to right 1 = Right to left 2 = Bottom to top 3 = Top to bottom 4 = Vertical from/to center 5 = Horizontal from/to center 6 = H&V rom/to center 7 = From SW to NE 8 = From SE to NW 9 = From NW to SE 10 = From NE to SW	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	
	PE_OPENING_DURATION	oD	oD	Layer opening transition duration	Rd/Wr	0	255	10	Unit = 1/10s	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2	

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

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PE_CLOSING_DURATION	cD	cD	Layer closing transition duration	Rd/Wr	0	255	10	Unit = 1/10s	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8	0 = Background Frame for output 1 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 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				
	TAKEINFO	TI	TI	TAKE information	Rd	0	2	0	0 = 1 shot TAKE 1 = 2 shot TAKE 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	10	0	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8			

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	COPY_TO	Nt	Nt	Destination for preset copy	Rd/Wr	0	10	0	0 = Current preset 1 = Next preset 2 = Previous preset 3 = Memory Preset 1 4 = Memory Preset 2 5 = Memory Preset 3 6 = Memory Preset 4 7 = Memory Preset 5 8 = Memory Preset 6 9 = Memory Preset 7 10 = Memory Preset 8			
	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 2 = Background Layer for output 1 3 = Pip 1 Layer for output1 Background Layer for output 2 in matrix mode 6 = Logo 1 8 = Audio Output 1 9 = Audio Output 2			
	SET_QUAD_LAYOUT	NQ	NQ	Quadravision Layout request (auto-reset)	Rd/Wr	13	13	0	13 = Reset of layer properties			
SETTINGS	R_FLICK	Rf	Rf	Anti-flicker level	Rd/Wr	0	7	2	0 = No antif-flicker	0 = Main output 1 = Preview output 2 = Recording output		
	R_GAMMA	Rg	Rg	Gamma correction level	Rd/Wr	5	40	10	Unit = 1/10	0 = Main output 1 = Preview output 2 = Recording output		
	R_SHARPNESS	Rs	Rs	Sharpness correction Level	Rd/Wr	0	255	128	128 = neutral	0 = Main output 1 = Preview output 2 = Recording output		

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

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

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

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	OPATTERN	OP	OP	Output test pattern	Rd/Wr	0	8	0	0 = No pattern 1 = Vertical Grey Scale 2 = Horizontal Grey Scale 3 = Vertical Color Bar 4 = Horizontal Color Bar 5 = Grid 6 = SMPTE 7 = Burst 8 = Centering	0 = Main output 1 = Preview output 2 = Recording output		
	OBLACK	OB	OB	Output black control	Rd/Wr	0	1	0	0 = Normal output 1 = Black output	0 = Main output 1 = Preview output 2 = Recording output		
	OUTIL_H	OH	OH	Output H size	Rd	0	65535	1600	Unit = pixels	0 = Main output 1 = Preview output 2 = Recording output		
	OUTIL_V	OV	OV	Output V size	Rd	0	65535	1200	Unit = pixels	0 = Main output 1 = Preview output 2 = Recording output		
	OFIELDRATE	OT	OT	Output frame frequency	Rd	100	10000	6000	Unit = 1/100Hz	0 = Main output 1 = Preview output 2 = Recording output		
	OIMAGE_OVERSCAN	OO	OO	Image Overscan / Underscan	Rd/Wr	0	1	0		0 = Main output 1 = Preview output 2 = Recording output		
	OSETDETECTHDCP	Oh	Oh	Enable/disable the Output HDCP detection	Rd/Wr	0	4	1	0 = Disable HDCP detection 1 = Automatic HDCP detection 2 = HDCP Configuration 1 3 = HDCP Configuration 2 4 = HDCP Configuration 3	0 = Main output 1 = Preview output 2 = Recording output		
	OISHDCP	On	On	Output HDCP status	Rd	0	1	0		0 = Main output 1 = Preview output 2 = Recording output		
	OSYNCOUTPUT	Om	Om	Output 2 copies the format and rate of output 1	Rd/Wr	0	1	0				
OUTPUT SCREEN	OSCREEN_UTIL_H	JH	JH	Horizontal size of the screen	Rd	0	65535	0	Unit = pixels			
	OSCREEN_UTIL_V	JV	JV	Vertical size of the screen	Rd	0	65535	0	Unit = pixels			
	OSCREEN_DEVICE_COUNT	JC	JC	Number of devices on the screen	Rd/Wr	1	16	1				
	OSCREEN_DEVICE_POSITION	JP	JP	Position of the current device in the screen	Rd/Wr	1	16	1	1=Left / Top depending on SoftEdgemode			

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
SOFTEDGE	SOFTEDGE_MODE	JM	JM	SoftEdge blending mode	Rd/Wr	0	1	0				
	SOFTEDGE_COVERING_SIZE	JZ	JZ	Covering size	Rd/Wr	0	1023	0	Unit = pixels			
	SOFTEDGE_ENABLE_CURVES	JE	JE	Enable the SoftEdge curves	Rd/Wr	0	1	0	0 = no SoftEdge			
	SOFTEDGE_POINT	Jp	Jp	Dots of the SoftEdge curves	Rd/Wr	0	65535	32768	Unit = percent, 1 dot X Y (X= LSB, Y = MSB)	0 = Top/Left border 1 = Bottom/Right border	0 = Dot 0 1 = Dot 1	0 = X position 1 = Y position
	SOFTEDGE_BLACK_SIZE	Jb	Jb	Black level correction area size	Rd/Wr	0	127	0	Unit = pixels	0 = Top/Left border 1 = Bottom/Right border	0 = Back End 1 1 = Back End 2	
	SOFTEDGE_BLACK_R_LEVEL	JR	JR	R component of the black level	Rd/Wr	0	63	0	0 = Black, 63 = Max Luma	0 = Top/Left border 1 = Bottom/Right border		
	SOFTEDGE_BLACK_G_LEVEL	JG	JG	G component of the black level	Rd/Wr	0	63	0	1 = Black, 63 = Max Luma	0 = Top/Left border 1 = Bottom/Right border		
	SOFTEDGE_BLACK_B_LEVEL	JB	JB	B component of the black level	Rd/Wr	0	63	0	2 = Black, 63 = Max Luma	0 = Top/Left border 1 = Bottom/Right border		
	PREVIEW_MODE	Jm	Jm	Activate the unified preview	Rd/Wr	0	1	0				
REFERENCE	REFREQUEST	Xr	Xr	Framelock source requested by user	Rd/Wr	0	16	0	0 = Analog input 1 as reference 1 = Analog input 2 as reference 2 = Analog input 3 as reference 3 = Analog input 4 as reference 4 = Analog input 5 as reference 5 = Analog input 6 as reference 8 = DVI 1 input as reference 9 = DVI 2 input as reference 10 = SDI 1 input as reference 11 = SDI 2 input as reference 12 = SDI 3 input as reference 13 = SDI 4 input as reference 14 = Back End 1 as reference 15 = Back End 2 as reference 16 = Back End 3 as reference	0 = Main output 1 = Preview output 2 = Recording output		

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Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	REFCURRENTREQUEST	Xe	Xe	Current Frame Lock source	Rd/Wr	0	16	0	0 = Analog input 1 as reference 1 = Analog input 2 as reference 2 = Analog input 3 as reference 3 = Analog input 4 as reference 4 = Analog input 5 as reference 5 = Analog input 6 as reference 8 = DVI 1 input as reference 9 = DVI 2 input as reference 10 = SDI 1 input as reference 11 = SDI 2 input as reference 12 = SDI 3 input as reference 13 = SDI 4 input as reference 14 = Back End 1 as reference 15 = Back End 2 as reference 16 = Back End 3 as reference	0 = Main output 1 = Preview output 2 = Recording output		
	REFMODE	Xm	Xm	Follow mode requested by user	Rd/Wr	0	5	0	0 = Internal 1 = Follow x1/2 2 = Follow x1 3 = Follow x2 4 = Follow x3 5 = Asynchronous Follow	0 = Main output 1 = Preview output 2 = Recording output		
	REFCURRENTMODE	Xc	Xc	Current follow mode	Rd/Wr	0	5	0	0 = Internal 1 = Follow x1/2 2 = Follow x1 3 = Follow x2 4 = Follow x3 5 = Asynchronous Follow	0 = Main output 1 = Preview output 2 = Recording output		
	REFFREQ	Xt	Xt	Frame rate of the reference signal	Rd	0	65535	0	Unit = 1/100Hz	0 = Main output 1 = Preview output 2 = Recording output		
	REFLOCKSTATUS	Xl	Xl	Framelock locked status	Rd	0	1	0	1 = locked	0 = Main output 1 = Preview output 2 = Recording output		

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Group	Name	Cmd	Resp	Description	Read /Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
LOGOS FRAMES	PMODE	PM	PM	Picture mode	Rd/Wr	0	5	0	0 = Normal mode 1 = Memory recall of logos and frames 2 = Logo recording mode 3 = Animated logo recording mode 4 = Frame recording mode 5 = Deleting picture mode			
	PEXECUTE	PG	PG	Picture control	Rd/Wr	0	1	0	If PMODE = Savexxx => Store the PCAPTURE_INDEX image If PMODE = Erasexxx => Delete the PCAPTURE_INDEX image Auto reset			
	PSTATUS	PE	PE	Picture management status	Rd	0	5	0	0 = Free 1 = Recalling picture 2 = Storing picture 3 = Picture format not compliant with current output format 4 = Deleting a picture 5 = Flash access error			
	PFRAMES_VALID	PF	PF	Frames validity (bitfield : bit0 = Frame1)	Rd	0	255	0	0 = No image 1 = Image is valid			
	PLOGOS_VALID	PZ	PZ	Logos validity (bitfield : bit0 = Logo1)	Rd	0	511	0	0 = No image 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 1 = Preview output 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			
	PCAPTURE_KEYING_TYPE	PB	PB	Picture Keying Type	Rd/Wr	0	2	0	0 = No keying 1 = Luma Key Keying 2 = ChromaKey Keying 3 = Luma Key Keying + DSK 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				

Group	Name	Cmd	Resp	Description	Read /Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	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 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 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	12	0	0 = No Picture 1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4			
	PSTATUS_WIDTH	Pw	Pw	Picture H size	Rd	0	32767	0		1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4		
	PSTATUS_HEIGHT	Ph	Ph	Picture V size	Rd	0	32767	0		1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4		

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	PSTATUS_STYLE	Ps	Ps	Logo style	Rd	0	2	0	0 = Normal logo 1 = Animated logo 2 = Frame	1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4		
	PSTATUS_FRAME_COUNT	Pn	Pn	Number of frames of an animated logo	Rd	1	255	1		1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4		
	PSTATUS_REFRESH_INTERVAL	Pi	Pi	Time between 2 frames of an animated logo	Rd/Wr	1	10000	56	Unit = 1ms	1 = Logo 1 2 = Logo 2 3 = Logo 3 4 = Logo 4 9 = Frame 1 10 = Frame 2 11 = Frame 3 12 = Frame 4		
LAN	LANENABLE	ne	ne	LAN enable	Rd/Wr	0	1	0	0 = Enable RS232 (disable LAN) 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 1 = Remote 2 = Gateway	0 = IP address high byte 1 = IP address mid high byte 2 = IP address mid low high byte 3 = IP address low byte	
	LANPORT	np	np	LAN port numbers	Rd/Wr	0	65535	10500	Local port : 10000 à 10999 Remote port : 0 à 65500	0 = Device 1 = Remote 2 = Gateway		
	LANNETMASK	nk	nk	LAN netmask	Rd/Wr	0	24	8	Number of 0bits from the right			

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	LANPROTOCOL	nt	nt	LAN protocol	Rd/Wr	0	1	1	0 = UDP Protocol 1 = TCP protocol 2 = AMX Protocol			
EDID	EDID_FORMAT	EF	EF	EDID preferred format	Rd/Wr	0	21	0	0 = VGA 1 = 800x480 2 = WVGA 3 = SVGA 4 = 720pRGB 5 = XGA 6 = WXGA 7 = SWXGA 8 = 800pRGB 9 = 1152x864 10 = 900pRGB 11 = 1600x900 12 = 960pRGB 13 = SXGA 14 = 1360x1024 15 = SXGA+ 16 = WSXGA+ 17 = 1080pRGB 18 = 2K 19 = UXGA 20 = WUXGA 21 = Custom	0 = Analog input 1 1 = Analog input 2 3 = DVI-D input 1 4 = DVI-D input 2		
	EDID_RATE	ER	ER	EDID preferred frame frequency	Rd/Wr	0	5	0	0 = 50 Hz 1 = 60 Hz 2 = 72 Hz 3 = 75 Hz 4 = 85 Hz 5 = Custom	0 = Analog input 1 1 = Analog input 2 3 = DVI-D input 1 4 = DVI-D input 2		
	EDID_REQUEST	ES	ES	Request for an EDID	Rd/Wr	0	2	0	0 = EDID is ready 1 = EDID saving 2 = EDID reading	0 = Analog input 1 1 = Analog input 2 3 = DVI-D input 1 4 = DVI-D input 2		
AUDIO	AUDIO_INPUT_MODE	Af	Af	Audio mode	Rd/Wr	0	1	1	0 = Free choice of audio input 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	Index #3
	AUDIO_INPUT_MAP	Ai	Ai	Audio input map	Rd/Wr	0	14	1	0 = No input 1 = Input1 2 = Input2 3 = Input3 4 = Input4 5 = Input5 6 = Input6 9 = Input9 10 = Input10 11 = Input11 12 = Input12 13 = Input13 14 = Input14	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	AUDIO_LEVEL	AL	AL	Audio input level	Rd/Wr	0	255	45	Linear scale, init value is 0 dB	0 = Input1 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	AUDIO_AUX_LEVEL	Al	Al	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 1 = Input2 2 = Input3 3 = Input4 4 = Input5 5 = Input6 8 = Input9 9 = Input10 10 = Input11 11 = Input12 12 = Input13 13 = Input14		
	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 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 1 = Preview output		

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

Group	Name	Cmd	Resp	Description	Read / Write	Min Value	Max value	Default value	Values	Index #1	Index #2	Index #3
	AUDIO_DESEMBEND_LOCKED	As	As	Information of audio channel presence for SDI inputs	Rd	0	1	1	1 : Locked	10 = Channel 11 – SDI 1 11 = Channel 11 – SDI 2 12 = Channel 11 – SDI 3 13 = Channel 12 – SDI 4		
RECORDING	RECORDING_MODE	Rm	Rm	Video Output display mode	Rd/Wr	0	1	0	0 = Output 1 1 = Output 2			
	RECORDING_IMAGE_ADJUST_POS_H	Rl	Rl	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			

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