## Aneovo

# RS232 Command List 

TX-32P/TX-42P

## Generic RS232 spec

| Connector -DB9 Male |
| :--- |
| Pin No. Name <br> 1 NC <br> 2 TXD (out) <br> 3 RX ( in ) <br> 4 NC <br> 5 GND <br> 6 NC <br> 7 NC <br> 8 NC <br> 9 NC${ }^{2}$ |


| COMMUNICATION SYSTEM | ASYNCHRONOUS |
| :--- | :--- |
| PROTOCOL | RS-232C |
| BAUD RATE | 9600 (bps) |
| DATA LENGTH | 8 (bits) |
| PARITY BIT | NONE |
| STOP BIT | 1 (bit) |
| FLOW CONTROL | NONE |
| COMMUNICATION CODE | ASCII |

Control command diagram


## Header block forma

| SOH | Reserved ${ }^{\circ} 0^{\prime}$ | Destination | Source | Message <br> Type | Message <br> Length |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ | $5^{\text {th }}$ | $6^{\text {th }}-7^{\text {th }}$ |

1stbyte) SOH: Start of Header
2ndbyte) Reserved: Reserved for future extensions
3rdbyte) Destination: Destination equipment ID. (Receiver)
"Monitor ID" to "Destination Address" conversion table is as follows,

| Monitor <br> ID | Destinatio <br> n <br> Address | Monitor <br> ID | Destinatio <br> $n$ <br> Address |
| :--- | :--- | :--- | :--- |
| 1 | ${ }^{\prime} \mathrm{A}^{\prime}(41 \mathrm{~h})$ | 14 | ${ }^{\prime} \mathrm{N}^{\prime}(4 \mathrm{Eh})$ |


| 2 | ' $\mathrm{B}^{\prime}(42 \mathrm{~h})$ | 15 | '0'(4Fh) |
| :---: | :---: | :---: | :---: |
| 3 |  | 16 | 'P'(50h) |
| 4 | 'D'(44h) | 17 | 'Q'(51h) |
| 5 | 'E'(45h) | 18 | 'R'(52h) |
| 6 | 'F'(46h) | 19 | 'S'(53h) |
| 7 | 'G' ${ }^{\text {' }}$ (47h) | 20 | 'T'(54h) |
| 8 | 'H'(48h) | 21 | 'U'(55h) |
| 9 | '1'(49h) | 22 | 'V'(56h) |
| 10 | 'J'(4Ah) | 23 | 'W'(57h) |
| 11 | ${ }^{\text {'K' }}$ '(4Bh) | 24 | 'X'(58h) |
| 12 | 'L'(4Ch) | 25 | ${ }^{\prime} Y^{\prime}(59 \mathrm{~h})$ |
| 13 | 'M'(4Dh) | 26 | 'Z'(5Ah) |
| ALL | '@’(40h) | 27~60 | 5Bh~7Ch |

Ex.) If you want to control a monitor that has the "ID No." as '1', specify a destination address ' A '(41h). If you want to control all of the monitors which are connected by a daisy chain, specify a destination address" "*' 2 Ah ).

4thbyte) Source: Source equipment ID. (Sender)
Specify a sender address.
The controller must be ' 0 ' ( 30 h )
5thbyte) Message Type: (Case sensitive.)
Refer to section 4.2 "Message block format" for more details.
ASCII 'A' (41h): Command
ASCII 'B' (42h): Command reply.
ASCII 'C' (43h): Get current parameter from a monitor.
ASCII 'D' (44h): "Get parameter" reply.
ASCII 'E' (45h): Set parameter.
ASCII 'F' (46h): "Set parameter" reply.
6 th -7 th bytes) Message Length:
Specify the length of the message (that follows the header) from STX to ETX.
This length includes STX and ETX.
The byte data must be encoded to ASCII characters.
Ex.) The byte data 3Ah must be encoded to ASCII characters ' 3 ' and 'A'
(33h and 41h).
The byte data OBh must be encoded to ASCII characters '0' and 'B' (30h and 42h).

## Message block format

## Get current parameter

| STX | OP code page |  | OP code |  | ETX |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hi | Lo | Hi | Lo |  |
| $1^{\text {st }}$ | $2^{\text {nd }}-3^{\text {rd }}$ |  | $4^{\text {th }}-5^{\text {th }}$ |  | $6^{\text {th }}$ |

1st byte) STX: Start of Message
ASCII STX (02h)

2nd - 3rd bytes) OP code page: Operation code page.
Specify the "OP code page" for the control which you want to get the status
Refer to "Table 5)-1 Operation code table" for each item.
OP code page data must be encoded to ASCII characters
Ex.) The byte data 02 h must be encoded to ASCII characters ' 0 ' and '2' ( 30 h and 32 h ).
OP code page 02h -> OP code page (Hi) = ASCII '0' (30h)
OP code page (Lo) = ASCII '2' (32h)

4th - 5th bytes) OP code: Operation code
OP code data must be encoded to ASCII characters.
Ex.) The byte data 1Fh must be encoded to ASCII characters ' 1 ' and ' $F$ ' ( 31 h and 46 h )
OP code 1Fh -> OP code (Hi) = ASCII '1' (31h)
OP code (Lo) = ASCII 'F' (46h)

6th byte) ETX: End of Message
ASCII ETX (03h)

## Get Parameter reply



1st byte) STX: Start of Message
ASCII STX (02h)
2nd - 3rd bytes) Result code.
These bytes indicate a result of the requested commands as follows,
OOh: No Error.
01h: Unsupported operation with this monitor or unsupported operation under
current condition.
This result code from the monitor is encoded to ASCII characters.
Ex.) The byte data 01h is encoded to ASCII character '0' and '1' (30h and 31h).

4th - 5 th bytes) OP code page: Operation code page.
These bytes indicate a replying item's OP code page.
This returned value from the monitor is encoded to ASCII characters.
Ex.) The byte data 02 h is encoded to ASCII character ' 0 ' and ' 2 ' ( 30 h and 32 h )
Refer to the operation codes table.

6th - 7th bytes) OP code: Operation code
These bytes indicate a replying item's OP code
This returned value from the monitor is encoded to ASCII characters.
Refer to the operation code table
Ex.) The byte data 1Fh is encoded to ASCII character ' 1 ' and ' $F$ ' ( 31 h and 46h).

8th -9th bytes) Type: Operation type code
This returned value from the monitor is encoded to ASCII characters.
Ex.) The byte data 01h is encoded to ASCII character ' 0 ' and ' 1 ' ( 30 h and 31 h )
00h: Set parameter
01h: Momentary
Like the AutoSetup function which automatically changes the parameter.

10th - 13th bytes) Max. value: Maximum value which monitor can accept. (16bits)
This returned value from the monitor is encoded to ASCII characters.
Ex.) ' 0 ','1','2' and ' 3 ' means 0123h (291)

14th - 17th bytes) Current Value: (16bits)
This returned value from the monitor is encoded to ASCII characters.
Ex.) '0','1','2' and '3' means 0123h (291)

18th byte) ETX: End of Message
ASCII ETX (03h)

## Set parameter

| STX |  | de page |  | code |  | t Valu |  | ETX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hi | Lo | Hi | Lo | MSB |  | LSB |  |
| $1^{\text {st }}$ | $2^{\text {nd }}-3^{\text {rd }}$ |  | $4^{\text {th }} 5^{\text {th }}$ |  | $6^{\text {th }}-9^{\text {th }}$ |  |  | $10^{\text {th }}$ |

1st byte) STX: Start of Message
ASCII STX (02h)
ASCII STX (02h)
2nd - 3rd bytes) OP code page: Operation code page
This OP code page data must be encoded to ASCII characters
Ex) The byte data 02h must be encoded to ASCII '0' and '2' (30h and 32h).
Refer to the Operation code table

## 4th - 5th bytes) OP code: Operation code

This OP code data must be encoded to ASCII characters
OP code 1Fh -> OP code (Hi) = ASCII '1' (31h)
OP code (Lo) = ASCII 'F' (46h)
Refer to the Operation code table

6th - 9th bytes) Set value: (16bit)
This data must be encoded to ASCII characters.
Ex.) 0123h -> 1st(MSB) = ASCII '0' (30h)
2nd = ASCII '1' (31h
3rd = ASCII '2' (32h)
$4 \mathrm{th}(\mathrm{LSB})=\mathrm{ASCII}$ ' 3 ' (33h)

10th byte) ETX: End of Message
ASCII ETX (03h)

## Set Parameter reply

| STX | Result |  | OP code page |  | OP code |  | Type |  | Max value |  |  | Requested setting Value |  |  | ETX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hi | Lo | Hi | Lo | Hi | Lo | Hi | Lo | MSB |  | LSB | MSB |  | LSB |  |
| $1^{\text {st }}$ | $2^{\text {nd }}-3^{\text {rd }}$ |  | $4^{\text {th }}-5^{\text {th }}$ |  | $6^{\text {th }}-7^{\text {th }}$ |  | $8^{\text {th }}-9^{\text {th }}$ |  | $10^{\text {th }}-13^{\text {th }}$ |  |  | $14^{\text {th }}-17^{\text {th }}$ |  |  | $18^{\text {th }}$ |

1st byte) STX: Start of Message
ASCII STX (02h)
2nd - 3rd bytes) Result code
ASCII '0"0' (30h 30h). No Error
ASCII '0"1' (30h, 31h): Unsupported operation with this monitor or unsupported operation
under current condition
4th - 5th bytes) OP code page: Echoes back the Operation code page for confirmation
Reply data from the monitor is encoded to ASCII characters
Ex.) OP code page 02h $\rightarrow$ OP code page = ASCII '0' and ' 2 ' ( 30 h and 32 h )
Refer to Operation code table.

6th - 7th bytes) OP code: Echoes back the Operation code for confirmation
Reply data from the monitor is encoded to ASCII characters
Ex.) OP code 1Fh -> OP code (Hi) = ASCII '1' (31h)
OP code (Lo) = ASCII 'F' (46h)
Refer to Operation code table

8th - 9th bytes) Type: Operation type code
ASCII '0"0' (30h 30h). Set parameter
ASCII '0"1' (30h, 31h): Momentary
Like Auto Setup function, that automatically changes the parameter
10th - 13th bytes) Max. value: Maximum value that monitor can accept. (16bits)
Reply data from the monitor is encoded to ASCII characters.
Ex.) '0"1"2"3' means 0123h (291

14th - 17th bytes) Requested setting Value: Echoes back the parameter for confirmation. (16bits)
Reply data from the monitor is encoded to ASCII characters
Ex.) '0"1"2"3' means 0123h (291)
18th byte) ETX: End of Message
ASCII ETX (03h)

## Check code

| Header |  |  |  |  |  |  | Message |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOH | Reserved | Destination Address | Source <br> Address | Message type | Message length |  | STX | OP code page |  | OP code |  | Set Value |  |  |  | ETX |
| 1 | 30 | 41 | 30 | 45 | 30 | 41 | 2 | 30 | 30 | 31 | 30 | 30 | 30 | 36 | 34 | 3 |
| $\mathrm{D}_{0}$ | $\mathrm{D}_{1}$ | $\mathrm{D}_{2}$ | $\mathrm{D}_{3}$ | $\mathrm{D}_{4}$ | $\mathrm{D}_{5}$ | $\mathrm{D}_{6}$ | $\mathrm{D}_{7}$ | $\mathrm{D}_{8}$ | $\mathrm{D}_{9}$ | $\mathrm{D}_{10}$ | $\mathrm{D}_{11}$ | $\mathrm{D}_{12}$ | $\mathrm{D}_{13}$ | $\mathrm{D}_{14}$ | $\mathrm{D}_{15}$ | $\mathrm{D}_{16}$ |

Check code (BCC) D17 = D1 xor D2 xor D3 xor ... xor D14 xor D15 xor D16
$=30 \mathrm{~h}$ xor 41 h xor 30 h xor 45 h xor 30 h xor 41 h
xor 02 h xor 30 h xor 30 h xor 31 h xor 30 h xor 30 h
xor 30 h xor 36 h xor 34 h xor 03 h
$=77 \mathrm{~h}$

Command Name Set Current Input Set Current Input Set Current Input Get Current Input Set Contrast Get Contras Set Brightness Set Brightness Get Brightness Set COLOR TEMP Set COLOR TEMP Set COLOR TEMP Set COLOR TEMP St COLOR TEMP Set COLOR TEMP Set Power Switch Set Power Switch Get Power Switch Set Volume Control Get Volume Control Set CLOCK Get CLOCK Set CLOCK PHASE Get CLOCK PHASE Set Audio Mute Set Audio Mute Set Audio Mute Get Audio Mute Set Image Size Set Image Size Get Inage Size Set Red Gain Get Red Gain Set Green Gain Get Green Gain Set Blue Gain Get Blue Gain Auto Adjust Reset Set Audio Select Set Audio Select Set Audio Select Get Control Set Control Lock Set Control Lock Get Control Lock Set IR remote Set IR remote Get IR remote

| RS232 Parameter | OP pag |
| :---: | :---: |
| 0001h: VGA1 | 00h |
| 0003h: HDMI1 | 00h |
| 0004h : HDMI2 or DVI | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0000h | 00h |
| 0064h | 00h |
| NA | 00h |
| 0047h : 5800 | 00h |
| 0054h : 6500 | 00h |
| 0069h: 9300 | 00h |
| 006Ah : sRGB | 00h |
| 006Bh : User1 | 00h |
| NA | 00h |
| 0000h: OFF | 00h |
| 0001h: On | 00h |
| 0002h: Sleep mode |  |
| (Power saving)(Get Only) | Ooh |
| 0000h | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0000h or 0002h: UNMUTE | 00h |
| 0001h: MUTE | 00h |
| NA | 00h |
| 0000h: Full Screen | 00h |
| 0001h: Original Size | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0000h | 00h |
| NA | 00h |
| 0001h | 00h |
| 0001h | 00h |
| 0001h : AUDIO | 02h |
| 0003h : HDMI | 02h |
| NA | 02h |
| 0000h: ON | 00h |
| 0001h: OFF | 00h |
| NA | 00h |
| 0001h: ON | 02h |
| 0004h: OFF | 02h |
| NA | 02h |

## OP code Set / Get command

01,30,41,30,45,30,41,02,30,30,36,30,30,30,30,31,03,73,0d 01,30,41,30,45,30,41,02,30,30,36,30,30,30,30,33,03,71,0d 01,30,41,30,45,30,41,02,30,30,36,30,30,30,30,34,03,76,0d 01,30,41,30,43,30,36,02,30,30,36,30,03,03,0D
01,30,41,30,45,30,41,02,30,30,31,32,30,30,30,30,03,77,0D 01,30,41,30,43,30,36,02,30,30,31,32,03,06,0D
01,30,41,30,45,30,41,02,30,30,31,30,30,30,30,30,03,75,0D 01,30,41,30,45,30,41,02,30,30,31,30,30,30,36,34,03,77,0D 01,30,41,30,43,30,36,02,30,30,31,30,03,04,0D
01,30,41,30,45,30,41,02,30,30,35,34,30,30,34,37,03,76,0D $01,30,41,30,45,30,41,02,30,30,35,34,30,30,35,34,03,74,0 \mathrm{D}$ 01,30,41,30,45,30,41,02,30,30,35,34,30,30,36,39,03,7A,0D $01,30,41,30,45,30,41,02,30,30,35,34,30,30,36,41,03,02,0 \mathrm{D}$ $01,30,41,30,45,30,41,02,30,30,35,34,30,30,36,42,03,01,0 \mathrm{D}$ 01,30,41,30,43,30,36,02,30,30,35,34,03,04,0D
$01,30,41,30,45,30,41,02,30,30,32,30,30,30,30,30,03,76,0 \mathrm{D}$ $01,30,41,30,45,30,41,02,30,30,32,30,30,30,30,31,03,77,0 \mathrm{D}$ 01,30,41,30,43,30,36,02,30,30,32,30,03,07,0D

01,30,41,30,45,30,41,02,30,30,36,32,30,30,30,30,03,70,0D 01,30,41,30,43,30,36,02,30,30,36,32,03,01,0D
01,30,41,30,45,30,41,02,30,30,30,45,30,30,30,30,03,01,0D 01,30,41,30,43,30,36,02,30,30,30,45,03,70,0D
01,30,41,30,45,30,41,02,30,30,33,45,30,30,30,30,03,02,0D $01,30,41,30,43,30,36,02,30,30,33,45,03,73,0 \mathrm{D}$ 01,30,41,30,45,30,41,02,30,30,38,44,30,30,30,30,03,08,0D 01,30,41,30,45,30,41,02,30,30,38,44,30,30,30,31,03,09,0D 01,30,41,30,43,30,36,02,30,30,38,44,03,79,0D
$01,30,41,30,45,30,41,02,30,30,32,31,30,30,30,30,03,77,0 \mathrm{D}$ 01,30,41,30,45,30,41,02,30,30,32,31,30,30,30,31,03,76,0D $01,30,41,30,43,30,36,02,30,30,32,31,03,06,0 \mathrm{D}$
01,30,41,30,45,30,41,02,30,30,31,36,30,30,32,36,03,77,0D $01,30,41,30,43,30,36,02,30,30,31,36,03,02,0 \mathrm{D}$
$01,30,41,30,45,30,41,02,30,30,31,38,30,30,32,36,03,79,0 \mathrm{D}$ $01,30,41,30,43,30,36,02,30,30,31,38,03,0 \mathrm{C}, 0 \mathrm{D}$
01,30,41,30,45,30,41,02,30,30,31,41,30,30,32,36,03,00,0D 01,30,41,30,43,30,36,02,30,30,31,41,03,75,0D
01,30,41,30,45,30,41,02,30,30,32,34,30,30,30,31,03,73,0D 01,30,41,30,45,30,41,02,30,30,32,35,30,30,30,31,03,72,0D 01,30,41,30,45,30,41,02,30,32,30,39,30,30,30,31,03,7E,0D 01,30,41,30,45,30,41,02,30,32,30,39,30,30,30,33,03,7C,0D 01,30,41,30,45,30,41,02,30,32,30,39,30,30,30,31,
01,30,41,30,45,30,41,02,30,30,46,42,30,30,30,30,03,70,0D $01,30,41,30,45,30,41,02,30,30,46,42,30,30,30,30,03,70,0 \mathrm{D}$
$01,30,41,30,45,30,41,02,30,30,46,42,30,30,30,31,03,71,0 \mathrm{D}$ $01,30,41,30,45,30,41,02,30,30,46,42,30,30,30,31$
$01,30,41,30,43,30,36,02,30,30,46,42,03,01,0 \mathrm{D}$
$01,30,41,30,45,30,41,02,30,32,33,46,30,30,30,31,03,02,0 \mathrm{D}$ 01,30,41,30,45,30,41,02,30,32,33,46,30,30,30,34,03,07,0D $01,30,41,30,43,30,36,02,30,32,33,46,03,72,0 D$

## Get Command Reply

01,30,30,41,46,31,32,02,30,30,30,30,36,30,30,30,30,30,30,35,30,30,30,31,03,7,0D 01,30,30,41,46,31,32,02,30,30,30,30,36,30,30,30,30,30,30,35,30,30,30,33,03,5,0D $01,30,30,41,46,31,32,02,30,30,30,30,36,30,30,30,30,30,30,35,30,30,30,34,03,2,0 \mathrm{D}$ 01,30,30,41,44,31,32,02,30,30,30,30,36,30,30,30,30,30,30,35,30,30,30,31,03,5,0D 01,30,30,41,46,31,32,02,30,30,30,30,31,32,30,30,30,30,36,34,30,30,30,30,03,4,0D 01,30,30,41,44,31,32,02,30,30,30,30,31,32,30,30,30,30,36,34,30,30,36,34,03,4,0D 01,30,30,41,46,31,32,02,30,30,30,30,31,30,30,30,30,30,36,34,30,30,36,34,03,4,0D $01,30,30,41,46,31,32,02,30,30,30,30,31,30,30,30,30,30,36,34,30,30,30,30,03,6,0 \mathrm{D}$ 10,30, $30,41,31,32020,30,30,36,34,30,30,03,6 \mathrm{D}$ $1,30,30,41,44,31,32,02,30,30,30,30,31,30,30,30,30,30,36,34,30,30,36,34,03,6,0 \mathrm{D}$ 1,30,30,41,46,31,32,02,30,30,30,30,35,34,30,30,30,30,46,46,30,30,34,37,03,7,0D $1,30,30,41,46,31,32,22,30,30,30,30,35,34,30,30,30,30,4,46,30,30,35,34,03,5,0 \mathrm{D}$ $1,30,30,41,4,31,32,02,30,30,30,30,35,34,30,30,30,30,46,46,30,30,36,3,, 03, B, 0 \mathrm{D}$ $1,30,30,41,46,31,32,02,30,30,30,30,35,34,30,30,30,30,46,46,30,30,36,41,03,73,0 D$ $1,30,30,41,46,31,32,22,30,30,30,30,35,34,30,30,30,30,46,46,30,30,36,42,03,70,0 \mathrm{D}$ $1,30,30,41,44,31,32,02,30,30,30,30,35,34,30,30,30,30,46,46,30,30,36,43,03,73,0 \mathrm{D}$ 1,30,30,41,46,31,32,02,30,30,30,30,32,30,30,30,30,30,30,32,30,30,30,30,03,5,0D $01,30,30,41,46,31,32,02,30,30,30,30,32,30,30,30,30,30,30,32,30,30,30,31,03,4,0 \mathrm{D}$ 01,30,30,41,44,31,32,02,30,30,30,30,32,30,30,30,30,30,30,32,30,30,30,31,03,6,0D 01,30,30,41,46,31,32,02,30,30,30,30,36,32,30,30,30,30,36,34,30,30,30,30,03,3,0D 01,30,30,41,44,31,32,02,30,30,30,30,36,32,30,30,30,30,36,34,30,30,30,31,03,0,0D 01,30,30,41,46,31,32,02,30,30,30,30,30,45,30,30,30,30,36,34,30,30,30,30,03,72,0D 01,30,30,41,44,31,32,02,30,30,30,30,30,45,30,30,30,30,36,34,30,30,36,34,03,72,0D 01,30,30,41,46,31,32,02,30,30,30,30,33,45,30,30,30,30,36,34,30,30,30,30,03,71,0D $01,30,30,41,44,31,32,02,30,30,30,30,33,45,30,30,30,30,36,34,30,30,36,34,03,71,0 \mathrm{D}$ $01,30,30,41,46,31,32,02,30,30,30,30,38,44,30,30,30,30,30,32,30,30,30,30,03,7 B, 0 D$ $01,30,30,41,46,31,32,02,30,30,30,30,38,44,30,30,30,30,30,32,30,30,30,31,03,7 \mathrm{~A}, 0 \mathrm{D}$ $01,30,30,41,44,31,32,02,30,30,30,30,38,44,30,30,30,30,30,31,30,30,30,31,03,7 \mathrm{~B}, 0 \mathrm{D}$ $01,30,30,41,46,31,32,02,30,30,30,30,32,31,30,30,30,30,30,31,30,30,30,30,03,7,0 \mathrm{D}$ $01,30,30,41,46,31,32,02,30,30,30,30,32,31,30,30,30,30,30,31,30,30,30,31,03,6,0 \mathrm{D}$ $01,30,30,41,44,31,32,02,30,30,30,30,32,31,30,30,30,30,30,31,30,30,30,31,03,4,0 \mathrm{D}$ 01,30,30,41,46,31,32,02,30,30,30,30,31,36,30,30,30,30,36,34,30,30,32,36,03,04,0D 01,30,30,41,44,31,32,02,30,30,30,30,31,36,30,30,30,30,36,34,30,30,33,38,03,09,0D $01,30,30,41,46,31,32,02,30,30,30,30,31,38,30,30,30,30,36,34,30,30,32,36,03,0 \mathrm{~A}, 0 \mathrm{D}$ 01,30,30,41,44,31,32,02,30,30,30,30,31,38,30,30,30,30,36,34,30,30,32,3E,03,00,0D 01,30,30,41,46,31,32,02,30,30,30,30,31,41,30,30,30,30,36,34,30,30,32,36,03,73,0D 01,30,30,41,44,31,32,02,30,30,30,30,31,41,30,30,30,30,36,34,30,30,32,3B,03,7C,0D 01,30,30,41,46,31,32,02,30,30,30,30,32,34,30,31,30,30,30,31,30,30,30,31,03,2,0D 01,30,30,41,46,31,32,02,30,30,30,30,32,35,30,31,30,30,30,31,30,30,30,31,03,3,0D $01,30,30,41,46,31,32,02,30,30,30,32,30,39,30,30,30,30,30,32,30,30,30,31,03, \mathrm{D}, 0 \mathrm{D}$ $01,30,30,41,46,31,32,02,30,31,30,32,30,39,30,30,30,30,30,34,30,30,30,33,03,8,0 \mathrm{D}$ 1 $1,30,30,41,44,31,32,02,30,30,30,32,30,39,30,30,30,30,30,32,30,30,30,31,03, \mathrm{~F}, 0 \mathrm{D}$ $1,30,30,41,46,31,32,02,30,30,30,30,46,42,30,30,30,30,30,32,30,30,30,30,03,3,0 \mathrm{D}$ $1,30,30,41,46,3,32,22,30,30,30,30,46,42,30,30,30,30,30,32,30,30,30,31,03,2,0 \mathrm{D}$ 1,30,30,41,44, $1,30,30,41,46,31,32,02,30,30,30,32,33,46,30,30,30,30,30,34,30,30,30,31,03,77,0 \mathrm{D}$ $01,30,30,41,46,31,32,02,30,30,30,32,33,46,30,30,30,30,30,34,30,30,30,34,03,72,0 \mathrm{D}$ $01,30,30,41,44,31,32,02,30,30,30,32,33,46,30,30,30,30,30,34,30,30,30,34,03,70,0 \mathrm{D}$

| Items | Command Name | $\begin{aligned} & \text { RS232 OP } \\ & \text { code Page (Hex) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { RS232 OP } \\ & \text { code (Hex) } \\ & \hline \end{aligned}$ | RS232 parameter | Supported | Access Method | Get command reply | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Current Input | 00h | 60h | 0001h: VGA1 | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | 0002h: VGA2 | Yes | Get/Set |  |  |
|  |  |  |  | 0003h: HDMI1 | Yes | Get/Set |  |  |
|  |  |  |  | 0004h : HDMI2 / DVI | Yes | Get/Set |  |  |
|  |  |  |  | Max. 0005h | Yes |  |  |  |
| 2 | Contrast | 00h | 12h | 0000h-0064h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 3 | Brightness | 00h | 10h | 0000h - 0064h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 4 | COLOR TEMP | 00h | 54h | 0047h : 5800 | Yes | Get/Set | Same as RS232 parameter | Need defined |
|  |  |  |  | 0054h : 6500 | Yes | Get/Set |  |  |
|  |  |  |  | 0069h: 9300 | Yes | Get/Set |  |  |
|  |  |  |  | 006Ah : sRGB | Yes | Get/Set |  |  |
|  |  |  |  | 006Bh: User1 | Yes | Get/Set |  |  |
|  |  |  |  | Max. 00FFh | Yes |  |  |  |
| 5 | Power Switch | 00h | 20h | 0000h: OFF | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | 0001h: On | Yes | Get/Set |  |  |
|  |  |  |  | 0002h: Sleep mode(Power saving)(Get Only) | Yes | Get |  | If send 0002h that is unavailabe |
|  |  |  |  | Max. 0002h | Yes |  |  |  |
| 6 | Volume Control | 00h | 62h | 0000h-001fh | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 001fh | Yes |  |  |  |
| 7 | Clock | 00h | 0eh | 0000h - 0064h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 8 | Phase | 00h | 3 eh | 0000h - 0064h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 9 | Audio Mute | 00h | 8Dh | 0000h or 0002h: UNMUTE | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | 0001h: MUTE | Yes | Get/Set |  |  |
|  |  |  |  | Max. 0002h | Yes |  |  |  |
| 10 | Image Size | 00h | 21h | 0000h: Full Screen | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | 0001h: Original Size | Yes | Get/Set |  |  |
|  |  |  |  | Max. 0001h | Yes |  |  |  |
| 11 | Red Gain | 00h | 16h | 0000h - 0064h | Yes | Get/Set | Same as RS232 parameter | offset value is 90 |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 12 | Green Gain | 00h | 18h | 0000h-0064h | Yes | Get/Set | Same as RS232 parameter | offset value is 90 |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 13 | Blue Gain | 00h | 1ah | 0000h - 0064h | Yes | Get/Set | Same as RS232 parameter | offset value is 90 |
|  |  |  |  | Max. 0064h | Yes |  |  |  |
| 14 | Auto Adjust | 00h | 24h | 0001h | Yes | Set | NA | VGA only |
|  |  |  |  | Max. 0001h | Yes |  | NA |  |
| 15 | Reset | 00h | 25h | 0001h | Yes | Set | NA |  |
|  |  |  |  | Max. 0001h | Yes |  | NA |  |
| 16 | Audio Select | 02h | 09h | 0001h : AUDIO1 | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | 0002h : AUDIO 2 | Yes |  |  |  |
|  |  |  |  | 0003h : HDMI1 | Yes |  |  |  |
|  |  |  |  | 0004h : HDMI2 | Yes |  |  |  |
|  |  |  |  | Max. 0004h | Yes |  |  |  |
| 17 | Key Lock | 00h | fbh | 0000h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0001h | Yes |  |  |  |
| 18 | IR Lock | 02h | 3fh | 0000h | Yes | Get/Set | Same as RS232 parameter |  |
|  |  |  |  | Max. 0004h | Yes |  |  |  |

