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# 1 RS-232 Communication Protocol

The following is the COM port setting:

Baud Rate: 9600bps

Parity: None

Data Bits: 8bits

Stop Bits: 1bit

Set CTS Mode: Off

Set XON/XOFF: Off

## Set and get command

Set Command

Type in : Y■Control\_Type■Function■Param■CR

Reply: Z■Control\_Type■Function■Param■CRDone>CR

Get Command:

Type in : Y■Control\_Type■Function■CR

Reply: Z■Control\_Type■Function■Param■CR

## Example:

1. "Y■1■16■32^CR" -> set Contrast value as 32

"Z■1■16■32■CR>" --> Reply value

"DoneCR" --> command setting succeeded

2. "Y■4■21■CR" -> get current output resolution

"Z■4■21■2■CR>" -> current resolution is 1024x768

Table 1: RS-232 Protocol

| Control Type | Function | Param (for Set) | Function Description            | Comment |
|--------------|----------|-----------------|---------------------------------|---------|
| 0            | 0        | N/A             | SIZE button on remote control   |         |
| 0            | 1        | N/A             | POWER button on remote control  |         |
| 0            | 2        | N/A             | FREEZE button on remote control |         |
| 0            | 3        | N/A             | 480p button on remote control   |         |
| 0            | 4        | N/A             | 576p button on remote control   |         |
| 0            | 5        | N/A             | 720p button on remote control   |         |
| 0            | 6        | N/A             | 1080i button on remote control  |         |
| 0            | 7        | N/A             | 1080p button on remote control  |         |
| 0            | 8        | N/A             | VGA button on remote control    |         |
| 0            | 9        | N/A             | SVGA button on remote control   |         |
| 0            | 10       | N/A             | XGA button on remote control    |         |
| 0            | 11       | N/A             | SXGA button on remote control   |         |

| Control Type     | Function | Param (for Set) | Function Description            | Comment                               |
|------------------|----------|-----------------|---------------------------------|---------------------------------------|
| 0                | 12       | N/A             | WXGA button on remote control   |                                       |
| 0                | 13       | N/A             | UXGA button on remote control   |                                       |
| 0                | 14       | N/A             | INFO button on remote control   |                                       |
| 0                | 15       | N/A             | UP button on remote control     |                                       |
| 0                | 16       | N/A             | NATIVE button on remote control |                                       |
| 0                | 17       | N/A             | LEFT button on remote control   |                                       |
| 0                | 18       | N/A             | OK button on remote control     |                                       |
| 0                | 19       | N/A             | RIGHT button on remote control  |                                       |
| 0                | 20       | N/A             | MENU button on remote control   |                                       |
| 0                | 21       | N/A             | DOWN button on remote control   |                                       |
| 0                | 22       | N/A             | EXIT button on remote control   |                                       |
| 0                | 23       | N/A             | AV button on remote control     |                                       |
| 0                | 24       | N/A             | YC button on remote control     |                                       |
| 0                | 25       | N/A             | COMP1 button on remote control  |                                       |
| 0                | 26       | N/A             | HDMI1 button on remote control  |                                       |
| 0                | 27       | N/A             | HDMI2 button on remote control  |                                       |
| 0                | 28       | N/A             | COMP2 button on remote control  |                                       |
| 0                | 29       | N/A             | VGA button on remote control    |                                       |
| 0                | 30       | N/A             | BLANK button on remote control  |                                       |
| 0                | 31       | N/A             | MUTE button on remote control   |                                       |
| 1: Set<br>2: Get | 4        | 0~100           | Color: Red                      |                                       |
| 1: Set<br>2: Get | 5        | 0~100           | Color: Green                    |                                       |
| 1: Set<br>2: Get | 6        | 0~100           | Color: Blue                     |                                       |
| 1: Set<br>2: Get | 16       | 0~100           | Brightness                      |                                       |
| 1: Set<br>2: Get | 17       | 0~100           | Contrast                        |                                       |
| 1: Set<br>2: Get | 25       | 0~100           | Hue                             |                                       |
| 1: Set<br>2: Get | 26       | 0~100           | Sharpness                       |                                       |
| 1: Set<br>2: Get | 29       | 0~100           | Saturation                      |                                       |
| 1: Set<br>2: Get | 41       | 0~100           | OSD Setting :H-Position         |                                       |
| 1: Set<br>2: Get | 42       | 0~100           | OSD Setting: V-Position         |                                       |
| 1: Set<br>2: Get | 43       | 0~100           | OSD Timeout                     |                                       |
| 1: Set<br>2: Get | 44       | 0~8             | OSD Background                  |                                       |
| 1: Set<br>2: Get | 50       | 0~3             | NR (Noise Reduction)            | 0: Off<br>1: Low<br>2: Mid<br>3: High |

| Control Type     | Function | Param (for Set) | Function Description | Comment  |
|------------------|----------|-----------------|----------------------|--|
| 1: Set<br>2: Get | 51       | 0~3             | Audio delay          | 0: Off<br>1: 40ms<br>2: 110ms<br>3: 150ms  |
| 3: Set<br>4: Get | 0        | 1~7             | Select Input Source  | 1: AV<br>2: YC<br>3: COMP1<br>4: COMP2<br>5: VGA<br>6: HDMI1<br>7: HDMI2   |
| 3: Set<br>4: Get | 1        | 0~5             | Size                 | 0: Full<br>1: Panscan<br>2: Overscan<br>3: Underscan<br>4: Letterbox   |
| 3: Set<br>4: Get | 21       | 0~18            | Output Resolution    | 0: Native<br>1: VGA<br>2: SVGA<br>3: XGA<br>4: SXGA<br>5: UXGA<br>6: 480i<br>7: 480p<br>8: 720p60<br>9: 1080i60<br>10: 1080p60<br>11: 576i<br>12: 576p<br>13: 720p50<br>14: 1080i50<br>15: 1080p50<br>16: WXGA<br>17: WSXGA<br>18: WUXGA |
| 3: Set           | 23       | 1               | Factory Reset        |  |
| 6: Set<br>7: Get | 0        | 0~1             | Power                | 0: Power Down<br>1: Power On   |
| 6: Set<br>7: Get | 1        | 0~1             | Freeze               | 0: Off<br>1: On  |
| 6: Set<br>7: Get | 2        | 0~1             | Blank                | 0: Off<br>1: On  |
| 6: Set<br>7: Get | 3        | 0~1             | Mute                 | 0: Off<br>1: On  |
| 6: Set<br>7: Get | 4        | 0~1             | Key lock             | 0: Off<br>1: On  |