**EVSW4K41**

RS232 Communication and Protocol

Baud rate: 9600 Data bit: 8 Stop bit: 1 Parity bit: none

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| **RS232 Command**  |   |   |
| **Communication protocol:** RS232 Communication Protocol   |   |
| Baud rate: 9600         Data bit: 8         Stop bit: 1          Parity bit: none   |   |
|   |   |   |
| **1. System Control**  |   |   |
| The ending mark of command is “<CR><LF>”.   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#GET\_FIRMWARE\_VERSION**   | Get the firmware version.   | @V1.0.0   |
| **#FACTORY\_RESET**   | Restore to factory defaults.   | @FACTORY\_RESET   |
| **#REBOOT**   | System reboot.   | @REBOOT   |
| **#HELP [PARAM]**   | Get the command details.   | #HELP SET\_AV   |
| [PARAM]=Null; Get all command list.   |
| [PARAM]=Any command; Get the English description and usage of the command.   | @SELECT VIDEO AND AUDIO INPUT PORT   |
|    | #SET\_AV PARAM1   |
|    | PARAM=A,PC1,PC2,PC3   |
|    | A - Airplay/Miracast   |
|    | PC1 - HDMI1   |
|    | PC2 - HDMI2   |
|    | PC3 - TYPE-C   |
| **#SET\_RST\_WIRELESS**   | Reset Airplay/Miracast power   | @RESET WIRELESS DEVICE   |
| **#SET\_KEYPAD\_LOCK 1**   | Lock front panel buttons.   | #SET\_KEYPAD\_LOCK 1   |
| **#SET\_KEYPAD\_LOCK 0**   | Unlock front panel buttons (Default).   | #SET\_KEYPAD\_LOCK 0   |
| **#GET\_KEYPAD\_LOCK**   | Get the locking status of the front panel buttons.   | @KEYPAD\_LOCK 1   |
|   |   |   |
| **2. Source Switching**  |   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#SET\_AV A**   | Select the input source: Airplay/Miracast (Default).   | @AV Airplay/Miracast   |
| **#SET\_AV PC1**   | Select the input source: PC1.   | @AV PC1   |
| **#SET\_AV PC2**   | Select the input source: PC2.   | @AV PC2   |
| **#SET\_AV PC3**   | Select the input source: PC3.   | @AV PC3   |
| **#GET\_AV**   | Get the current input source.   | @AV PC1   |
| **#SET\_AUTO\_SWITCH 0**   | Disable auto-switching mode.   | @AUTO\_SWITCH 0   |
| **#SET\_AUTO\_SWITCH 1**   | Enable auto-switching mode.   | @AUTO\_SWITCH 1   |
| **#GET\_AUTO\_SWITCH**   | Get the auto-switching status.   | @AUTO\_SWITCH 1   |
|   |   |   |
| **3. CEC/RS232 Function Setting**  |   |   |
| The ending mark of command is “<CR><LF>”.   |   |
| **Command**   | **Function**   | **Command & Feedback Example**   |
| **#SET\_SYNCACT\_CEC 1**   | Enable the function of automatically sending CEC commands.   | @SYNCACT\_CEC 1   |
| When detecting video input signal or not detecting any video signal, the switcher will automatically send the corresponding CEC command to control the display device.   |
| **#SET\_SYNCACT\_CEC 0**   | Disable the function of automatically sending CEC commands.   | @SYNCACT\_CEC 0   |
| **#GET\_SYNCACT\_CEC**   | Get the function setting status of automatically sending CEC commands.   | @SYNCACT\_CEC 1   |
| **#SET\_SYNCACT\_RS232 1**   | Enable the function of automatically sending RS232 commands.   | @SYNCACT\_RS232 1   |
| When detecting video input signal or not detecting any video signal, the switcher will automatically send the corresponding RS232 command to control the display device.   |
| **#SET\_SYNCACT\_RS232 0**   | Disable the function of automatically sending RS232 commands.   | @SYNCACT\_RS232 0   |
| **#GET\_SYNCACT\_RS232**   | Get the function setting status of automatically sending RS232 commands.   | @SYNCACT\_RS232 1   |
| **#SET\_DISPLAY 1**   | Power on display device (Simultaneously sending CEC and RS232 commands to display device).   | @DISPLAY 1   |
| **#SET\_DISPLAY 0**   | Power off display device (Simultaneously sending CEC and RS232 commands to display device).   | @DISPLAY 0   |
| **4. Function Setting**  |   |   |
| The ending mark of command is “<CR><LF>”.   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#SET\_OFF\_CNT 1**   | Set the number of sending DISPLAY OFF command to 1 time.   | @OFF\_CNT 1   |
| **#SET\_OFF\_CNT 2**   | Set the number of sending DISPLAY OFF command to 2 times.   | @OFF\_CNT 2   |
| **#GET\_OFF\_CNT**   | Get the number of sending DISPLAY OFF command.   | @OFF\_CNT 1   |
| **#SET\_OFF\_DELAY [PARAM]**   | Set the delay time of sending DISPLAY OFF command to [PARAM].   | #SET\_OFF\_DELAY 5   |
| [PARAM]=5~100 (1=100ms).   | @OFF\_DELAY 5   |
| **#GET\_OFF\_DELAY**   | Get the delay time of sending DISPLAY OFF command.   | @OFF\_DELAY 5   |
| **#SET\_OUTPUT\_HDCP [PARAM]**   | Set the HDCP mode of output port to [PARAM]. [PARAM]=1~3:   | #SET\_OUTPUT\_HDCP 1   |
| 1 - ACTIVE   |
| 2 - ON   |
| 3 - OFF   | @OUTPUT\_HDCP 1   |
| **#GET\_OUTPUT\_HDCP**   | Get the HDCP mode of output port.   | @OUTPUT\_HDCP 1   |
| **#SET\_SW\_HDCP\_MODE [PARAM]**   | Switch the input ports to support HDCP2.2 status. [PARAM]= 0/1.   | #SET\_SW\_HDCP\_MODE 1   |
| 0 - UNSUPPORT HDCP2.2   |
| 1 - SUPPORT HDCP2.2   | @SW\_HDCP\_MODE 1   |
| **#GET\_SW\_HDCP\_MODE**   | Get the HDCP2.2 status of input ports.   | @SW\_HDCP\_MODE 1   |
| **#UPLOAD\_USER\_EDID [PARAM]**   | Upload the user-defined EDID [PARAM].   | #UPLOAD\_USER\_EDID 1   |
| PARAM = 1 ~ 5   |
| 1 – User-defined EDID 1   |
| 2 - User-defined EDID 2   |
| 3 - User-defined EDID 3   |
| 4 - User-defined EDID 4   |
| 5 - User-defined EDID 5   |
| When the command applied, system prompts to upload the EDID file (.bin). Operation will be cancelled in 10 seconds.   | @USER\_EDID 1 READY   |
|    | PLEASE SEND EDID DATA IN 10S   |
|    | OK/ERROR   |
| **#SET\_DTIME [PARAM1]: [PARAM2]**   | When not detecting video input signal, set the auto power-off time of display device to [PARAM1]: [PARAM2]. The default time is 10 minutes.   | **#SET\_DTIME 1:30**   |
| [PARAM1]=0~30 minutes.   |
| [PARAM2]=0~1800 seconds.   | @DTIME 1:30   |
| **#GET\_DTIME**   | Get the auto power-off time of display device.   | @DTIME 30:0   |
|   |   |   |
| **5. Special Commands**  |   |   |
| ***Note:****The below commands don’t need ending mark.*   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#SET\_ON\_[PARAM1]\_ [PARAM2]:XXXX**   | Set the ASCII RS232 command **XXXX** to be sent to control the third-party device when the **DISPLAY ON** button is pressed.   | #SET\_ON\_05\_30:1234567   |
| [PARAM1] = 00~06 (Baud Rate)   |
| 00 - 115200   |
| 01 - 57600   |
| 02 - 38400   |
| 03 - 19200   |
| 04 - 9600   |
| 05 - 4800   |
| 06 - 2400   |
| [PARAM2] = 00~99. The delay time of sending command.   |
| XXXX: Any ASCII code (up to 48 bytes).   | @BAUDRATE: 4800   |
|    | @DELAY TIME: 30 s   |
|    | @DISPLAY ON TO SEND:1234567   |
| Page Break   |   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#SET\_H\_ON\_[PARAM1]\_ [PARAM2]:XX XX**   | Set the HEX RS232 command **XX XX** to be sent to control the third-party device when the **DISPLAY ON** button is pressed.   | #SET\_H\_ON\_05\_30:31 32 33 34 35   |
| [PARAM1] = 00~06 (Baud Rate)   |
| 00 - 115200   |
| 01 - 57600   |
| 02 - 38400   |
| 03 - 19200   |
| 04 - 9600   |
| 05 - 4800   |
| 06 - 2400   |
| [PARAM2] = 00~99. The delay time of sending command.   |
| XX XX: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).   | @BAUDRATE: 4800   |
|    | @DELAY TIME: 30 s   |
|    | @DISPLAY ON HEX TO SEND:31 32 33 34 35   |
| **#SET\_OF\_[PARAM1]\_ [PARAM2]:XXXX**   | Set the ASCII RS232 command **XXXX** to be sent to control the third-party device when the **DISPLAY OFF** button is pressed.   | #SET\_OF\_05\_30:ABCDEFG   |
| [PARAM1] = 00~06 (Baud Rate)   |
| 00 - 115200   |
| 01 - 57600   |
| 02 - 38400   |
| 03 - 19200   |
| 04 - 9600   |
| 05 - 4800   |
| 06 - 2400   |
| [PARAM2] = 00~99. The delay time of sending command.   |
| XXXX: Any ASCII code (up to 48 bytes).   | @BAUDRATE: 4800   |
|    | @DELAY TIME: 30 s   |
|    | @DISPLAY OFF TO SEND:ABCDEFG   |
| Page Break   |   |   |
| **Command**   | **Description**   | **Command & Feedback Example**   |
| **#SET\_H\_OF\_[PARAM1]\_ [PARAM2]:XX XX**   | Set the HEX RS232 command **XX XX**to be sent to control the third-party device when the **DISPLAY OFF** button is pressed.    | #SET\_H\_OF\_05\_30:41 42 43 44 45   |
| [PARAM1] = 00~06 (Baud Rate)   |
| 00 - 115200   |
| 01 - 57600   |
| 02 - 38400   |
| 03 - 19200   |
| 04 - 9600   |
| 05 - 4800   |
| 06 - 2400   |
| [PARAM2] = 00~99. The delay time of sending command.   |
| XX XX: Any HEX code (0-9, A-F; up to 20 bytes. It must have a blank between 2 different XX).   | @BAUDRATE: 4800   |
|    | @DELAY TIME: 30 s   |
|    | @DISPLAY OFF HEX TO SEND:41 42 43 44 45   |