

# SDS-7000 RS232 Control Protocol

## Port Configuration

These are the settings that are required for successful communication with a SDS-7000.

### Serial settings

Baud Rate: 115200

Data Bits: 8

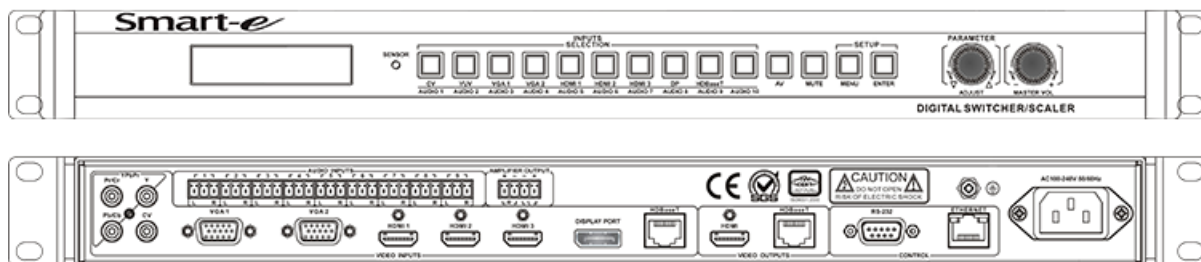
Parity: None

Stop Bits: 1

### Ethernet settings

IP Address: 192.168.1.190

Port: 6666



All commands are shown in ASCII.

## Commands

### 1. Video Switch Command

Command	Response	Description
S SOURCE 0.	>SOURCE CV	CV INPUT
S SOURCE 1.	>SOURCE YPbPr	YPbPr INPUT
S SOURCE 2.	>SOURCE VGA1	VGA1 INPUT
S SOURCE 3.	>SOURCE VGA2	VGA2 INPUT
S SOURCE 4.	>SOURCE HDMI1	HDMI1 INPUT
S SOURCE 5.	>SOURCE HDMI2	HDMI2 INPUT
S SOURCE 6.	>SOURCE HDMI3	HDMI3 INPUT
S SOURCE 7.	>SOURCE DisplayPort	DisplayPort INPUT
S SOURCE 8.	>SOURCE HDBaseT	HDBaseT INPUT
R SOURCE.	>Video Input: YPbPr	Read Current Video input

## 2. Audio Switch Command

Command	Response	Description
S AUDIO 0.	>AUDIO 1 INPUT	AUDIO 1 INPUT
S AUDIO 1.	>AUDIO 2 INPUT	AUDIO 2 INPUT
S AUDIO 2.	>AUDIO 3 INPUT	AUDIO 3 INPUT
S AUDIO 3.	>AUDIO 4 INPUT	AUDIO 4 INPUT
S AUDIO 4.	>AUDIO 5 INPUT	AUDIO 5 INPUT
S AUDIO 5.	>AUDIO 6 INPUT	AUDIO 6 INPUT
S AUDIO 6.	>AUDIO 7 INPUT	AUDIO 7 INPUT
S AUDIO 7.	>AUDIO 8 INPUT	AUDIO 8 INPUT
S AUDIO 8.	>AUDIO 9 INPUT	AUDIO 9 INPUT
S AUDIO 9.	>HDMI&HDBaseT AUDIO INPUT	HDMI&HDBaseT Audio Input for Video is HDMI&HDBaseT
R AUDIO.	>Audio Input: AudioAnalog 1	Read Current Audio Input

## 3. Audio Input Volume Adjust Command

Command	Response	Description
A [X] INPUT 0%	>AUDIO INPUT [X] 0dB	Audio Input [x] setting 0dB
A [X] INPUT 1%	>AUDIO INPUT [X] -3dB	Audio Input [x] setting -3dB
A [X] INPUT 2%	>AUDIO INPUT [X] -6dB	Audio Input [x] setting -6dB
A [X] INPUT 3%	>AUDIO INPUT [X] -9dB	Audio Input [x] setting -9dB
A [X] INPUT 4%	>AUDIO INPUT [X] -12dB	Audio Input [x] setting -12dB
A [X] INPUT 5%	>AUDIO INPUT [X] -15dB	Audio Input [x] setting -15dB
A [X] INPUT 6%	>AUDIO INPUT [X] -18dB	Audio Input [x] setting -18dB
A [X] INPUT 7%	>AUDIO INPUT [X] -21dB	Audio Input [x] setting -21dB

[X] Represents the audio input number. When [X] is 10, the settings are applied to HDMI1, HMDI2, HDMI3 or HDBaseT inputs when selected.

## 4. Audio Output Volume Adjust Command

Command	Response	Description
A+ OUTPUT%	>Analog AUDIO OUTPUT + 0.5dB	Analog Audio Output setting + 0.5dB
A- OUTPUT%	>Analog AUDIO OUTPUT - 0.5dB	Analog Audio Output setting - 0.5dB
B+ OUTPUT%	>HDMI AUDIO OUTPUT + 0.5dB	HDMI Audio Output setting + 0.5dB
B- OUTPUT%	>HDMI AUDIO OUTPUT - 0.5dB	HDMI Audio Output setting - 0.5dB
MUTE ON%	>MUTE ON	Audio Output Mute On
MUTE OFF%	>MUTE OFF	Audio Output Mute Off
CLOSE 0%	>Analog AUDIO MUTE ON	Analog Audio MUTE ON
OPEN 0%	>Analog AUDIO MUTE OFF	Analog Audio MUTE OFF
CLOSE 1%	>HDMI AUDIO MUTE ON	HDMI Audio MUTE ON
OPEN 1%	>HDMI AUDIO MUTE OFF	HDMI Audio MUTE OFF

## 5. Image adjustment commands

Command	Response	Description
Auto Adjust*	>VGA Input Auto Adjust	VGA Image auto adjust
VStart+*	>VGA Input V Start + 1	Move the VGA input image one column up
VStart-*	>VGA Input V Start - 1	Move the VGA input image one column down
HStart+*	>VGA Input H Start + 1	Move the VGA input image one column left
HStart-*	>VGA Input H Start - 1	Move the VGA input image one column right
HTotal+*	>VGA Input H Total + 1	Add 1 column to the total of VGA input images
HTotal-*	>VGA Input H Total - 1	Remove 1 column of the total of VGA input images
Brightness 000*	>Brightness Value: 000	Set Brightness
Brightness*	>Brightness Value: 000	Read Brightness
Contrast 000*	>Contrast Value: 000	Set Contrast
Contrast*	>Contrast Value: 000	Read Contrast

## 6. Resolution Command

Command	Response	Description
S OUTPUT 0!	>OUTPUT 640x480@60Hz	Resolution Output 640x480@60Hz
S OUTPUT 1!	>OUTPUT 800x600@60Hz	Resolution Output 800x600@60Hz
S OUTPUT 2!	>OUTPUT 1024x768@60Hz	Resolution Output 1024x768@60Hz
S OUTPUT 3!	>OUTPUT 1280x720@60Hz	Resolution Output 1280x720@60Hz
S OUTPUT 4!	>OUTPUT 1280x800@60Hz	Resolution Output 1280x800@60Hz
S OUTPUT 5!	>OUTPUT 1280x960@60Hz	Resolution Output 1280x960@60Hz
S OUTPUT 6!	>OUTPUT 1280x1024@60Hz	Resolution Output 1280x1024@60Hz
S OUTPUT 7!	>OUTPUT 1360x768@60Hz	Resolution Output 1360x768@60Hz
S OUTPUT 8!	>OUTPUT 1366x768@60Hz	Resolution Output 1366x768@60Hz
S OUTPUT 9!	>OUTPUT 1400x1050@60Hz	Resolution Output 1400x1050@60Hz
S OUTPUT A!	>OUTPUT 1440x900@60Hz	Resolution Output 1440x900@60Hz
S OUTPUT B!	>OUTPUT 1600x1200@60Hz	Resolution Output 1600x1200@60Hz
S OUTPUT C!	>OUTPUT 1680x1050@60Hz	Resolution Output 1680x1050@60Hz
S OUTPUT D!	>OUTPUT 1920x1080@50Hz	Resolution Output 1920x1080@50Hz
S OUTPUT E!	>OUTPUT 1920x1080@60Hz	Resolution Output 1920x1080@60Hz
S OUTPUT F!	>OUTPUT 1920x1200@60Hz	Resolution Output 1920x1200@60Hz
R OUTPUT!	>Output Resolution: 800x600@60Hz	Read Current Output Format

## 7. Other commands

Command	Response	Description
<DEFAULT>	>DEFAULT OK	Restore factory defaults in next charge
<COPYEDID>	>COPY EDID OK	Copy EDID display device to HDMI interface
<SIPR[192-168-1-190]>	>SIPR:192.168.1.190	Set the IP address
<GAR[192-168-1-1]>	>GAR:192.168.1.1	Set the gateway address
<SUBR[255-255-255-0]>	>SUBR:255.255.255.0	Set the subnet source address
<SPORT[6666]>	>SPORT:6666	Set the port number
<SIPR>	>SIPR:192.168.1.190	Query the IP address
<GAR>	>GAR:192.168.1.1	Query the gateway address
<SUBR>	>SUBR:255.255.255.0	Query the subnet mask
<SPORT>	>SPORT:6666	Query the port number
<BellOn>	>Bell On	Open the buzzer
<BellOff>	>Bell Off	Close the buzzer
<BellStatus>	>Bell Status: ON	Query buzzer status
<SW>	>LPMCU SW Versions: V1.0	Check the software version
	>FPMCU SW Versions: V1.0	
	>FLMCU SW Versions: V1.0	