

RS-232 Control Command Format – Video Wall Displays (TLxxH7)

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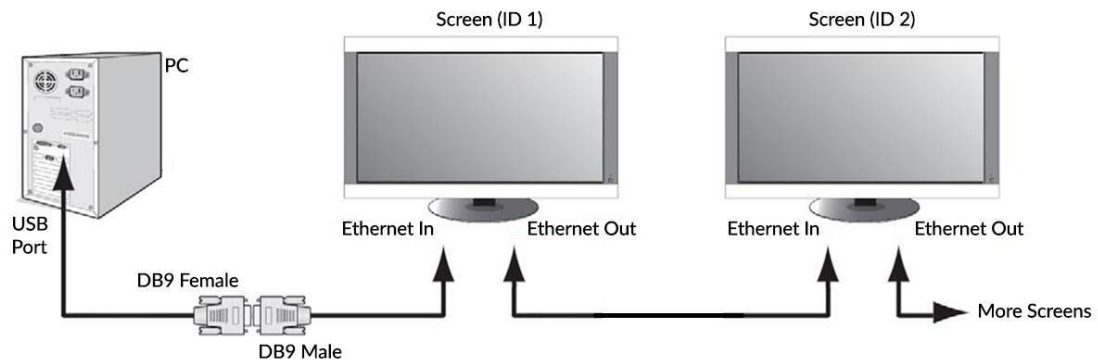


RS-232 Control

You can control this monitor by using a personal computer with the USB to DB9 cable. The data is transmitted between devices through the cable.

RS-232 Data Flow (using by 9Pin RS-232 Cable)

You can control this monitor by using a personal computer with RS-232 terminal. RS-232 data is transmitted between devices through a DUB9 Cable.



COM Port Settings

Protocol	RS-232
Baud Rate	9600bps
Data Bits	8 Bit
Parity Bit	None
Stop Bit	1 Bit
Parity	None
Flow Control	Custom

Write ID Control Command Format

You can either set your screens IDs individually using the remote control.

Manually: Using the remote control press “MENU” then navigate to and select “Video Wall Set”:



Then ensure that each screen’s “Board ID” has a unique value so that you can send commands separately to each screen:



You can use the “LEFT” and “RIGHT” buttons to change your screen’s ID.

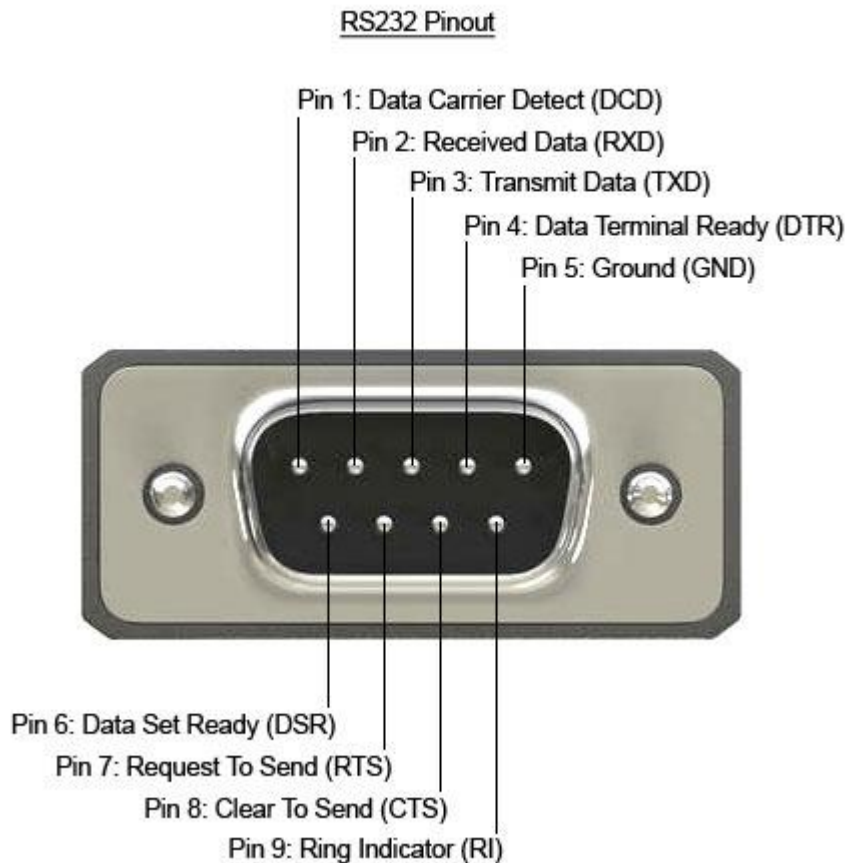
The data format is RS232 serial port multi-machine communication format.



- DATA1: Communication data header The system is fixed to 0xD5
- DATA2: Address is the driver board address identifier (0x11 – 0xAA)
- DATA3: Address is the last address of the driver board (0x11 – 0xAA)
- DATA4: Command 1
- DATA5: Command 2 See the following table for details:
- DATA6: Data Verification Code 0xAA

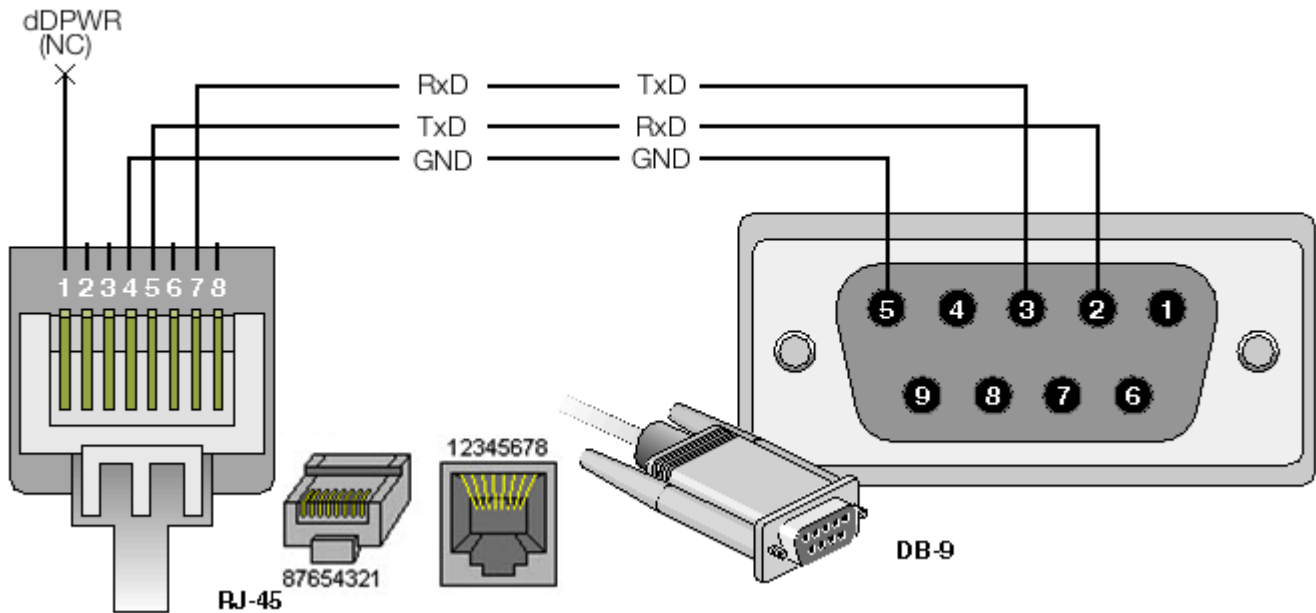
For example; splicing the AV channel from 1,1 to 3,3 to the large 3X3 screen: D5 11 33 20 00 AA

RS-232 Pin-Out Diagram.



RS-232 to RJ-45 Pin-Out Diagram Conversion.

The Diagram below shows how to convert the RS-232 to RJ45 and which cable needs to be inserted into which pin on the RJ45 cable.



Control OSD Command Format

Control	Command
Power On:	D5 11 33 10 00 AA
Power Off:	D5 11 33 10 01 AA
AV	D5 11 33 20 00 AA
S-Video	D5 11 33 20 01 AA
VGA	D5 11 33 20 02 AA
DVI	D5 11 33 20 03 AA
HDMI	D5 11 33 20 05 AA
DP	D5 11 33 20 08 AA
Contrast down	D5 11 33 30 00 AA
Contrast up	D5 11 33 30 01 AA
Brightness - down	D5 11 33 31 00 AA
Brightness - up	D5 11 33 31 01 AA
Colour - down	D5 11 33 32 00 AA
Colour - up	D5 11 33 32 01 AA
Tone - down	D5 11 33 33 00 AA
Tone - up	D5 11 33 33 01 AA
Sharpness – Down	D5 11 33 34 00 AA
Sharpness – Up	D5 11 33 34 01 AA
R gain – Down	D5 11 33 35 00 AA
R gain – UP	D5 11 33 35 01 AA
G gain – Down	D5 11 33 36 00 AA
G gain – Up	D5 11 33 36 01 AA
B gain – Down	D5 11 33 37 00 AA
B gain – Up	D5 11 33 37 01 AA
Horizontal - Down	D5 11 33 38 00 AA
Horizontal - Up	D5 11 33 38 01 AA
Vertical – Down	D5 11 33 39 00 AA
Vertical - Up	D5 11 33 39 01 AA
VGA/DVI - RGB control – Down	D5 11 33 40 00 AA
VGA/DVI - RGB control – Up	D5 11 33 40 01 AA
VGA/DVI - RGB brightness - Down	D5 11 33 41 00 AA
VGA/DVI - RGB brightness – Up	D5 11 33 41 01 AA
VGA/DVI - PC colour temperate – Normal	D5 11 33 42 01 AA
VGA/DVI - PC colour temperature – Warm	D5 11 33 43 01 AA
VGA/DVI - PC colour temperature – Cool	D5 11 33 44 01 AA
VGA/DVI - Colour temperature – R gain – Down	D5 11 33 45 00 AA
VGA/DVI - Colour	D5 11 33 45 01 AA

temperature – R gain - Up	
VGA/DVI - Colour temperature – G gain - Down	D5 11 33 46 00 AA
VGA/DVI - Colour temperature – G gain – Up	D5 11 33 46 01 AA
VGA/DVI - Colour temperature – B gain – Down	D5 11 33 47 00 AA
VGA/DVI - Colour temperature – B gain – Up	D5 11 33 47 01 AA
VGA/DVI - ADC R Offset – Down	D5 11 33 48 00 AA
VGA/DVI - ADC R Offset – Up	D5 11 33 48 01 AA
VGA/DVI - ADC G Offset – Down	D5 11 33 49 00 AA
VGA/DVI - ADC G Offset – Up	D5 11 33 49 01 AA
VGA/DVI - ADC B Offset – Down	D5 11 33 4A 00 AA
VGA/DVI - ADC B Offset - Up	D5 11 33 4A 01 AA
VGA/DVI – ADC R Gain - Down	D5 11 33 4B 00 AA
VGA/DVI – ADC R Gain - Up	D5 11 33 4B 01 AA
VGA/DVI – ADC G Gain - Down	D5 11 33 4C 00 AA
VGA/DVI – ADC G Gain - Up	D5 11 33 4C 01 AA
VGA/DVI – ADC B Gain - Down	D5 11 33 4E 00 AA
VGA/DVI – ADC B Gain - Up	D5 11 33 4F 01 AA
VGA/DVI – Auto Adjust	D5 11 33 4E 01 AA
VGA/DVI – Horizontal Position - Down	D5 11 33 4F 00 AA
VGA/DVI – Horizontal Position - Up	D5 11 33 4F 01 AA
VGA/DVI – Vertical Position - Down	D5 11 33 50 00 AA
VGA/DVI – Vertical Position - Up	D5 11 33 50 01 AA
VGA/DVI – Automatic Colour Adjust	D5 11 33 51 01 AA
VGA/DVI – Clock Adjust - Down	D5 11 33 52 00 AA

VGA/DVI – Clock Adjust – Up	D5 11 33 52 01 AA
VGA/DVI – Phase Adjust - Down	D5 11 33 53 00 AA
VGA/DVI – Phase Adjust - Up	D5 11 33 53 01 AA
VGA/DVI Horizontal Frame Adjustment	D5 11 33 5a 00 – 100 (Number input based on adjustment desired) AA
VGA/DVI Vertical Frame Adjustment	D5 11 33 5b 00 – 100 (Number input based on adjustment desired) AA
VGA/DVI Still Image	D5 11 33 5c 01 AA
System – User reset	D5 11 33 60 01 AA
System – Save data	D5 11 33 70 01 AA
Fan control – temperature controlled	D5 11 33 76 00 AA
Fan control – Fan on	D5 11 33 76 01 AA
Fan control – Fan off	D5 11 33 76 02 AA
Fan control – automatic temperature control - Max	D5 11 33 77 xx AA
Fan control – automatic temperature control – Minimum	D5 11 33 78 xx AA
Screen information	D5 11 33 E0 xx AA
Parameter Adjustment – Ti mode adjustment	D5 11 33 80 00 AA
Parameter Adjustment – Ti mode adjustment	D5 11 33 80 01 AA
Parameter Adjustment – Ti mode - Normal	D5 11 33 81 00 AA
Parameter Adjustment – Ti mode - Memory	D5 11 33 81 01 AA
Software version	D5 11 33 82 01 AA
Automatic boot adjustment - Off	D5 11 33 83 00 AA
Automatic boot adjustment – On	D5 11 33 83 01 AA
No signal colour - Black	D5 11 33 85 00 AA
No signal colour - Blue	D5 11 33 85 01 AA
Backlight adjustment - Down	D5 11 33 90 00 AA
Backlight adjustment - Up	D5 11 33 90 01 AA
Test signal – Down	D5 11 33 9F 00 AA
Test signal - Up	D5 11 33 9F 01 AA
Plan mode – preplan mode – Save	D5 11 33 A0 01 - 16 AA
Plan mode - Transfer	D5 11 33 A1 01 – 16 AA
Backlight brightness – Adjust	D5 11 33 A2 00 – 255 AA

Colour systems	D5 11 33 A3 00 AA
Colour systems - PAL	D5 11 33 A3 01 AA
Colour systems - NTSC	D5 11 33 A3 02 AA
Colour systems - SECAM	D5 11 33 A3 03 AA
Noise reduction mode – Turn off	D5 11 33 A4 00 AA
Noise reduction mode – Low	D5 11 33 A4 01 AA
Noise reduction mode – Medium	D5 11 33 A4 02 AA
Noise reduction mode – High	D5 11 33 A4 03 AA
Noise reduction mode – automatic	D5 11 33 A4 04 AA
AB group exchange – Normal	D5 11 33 A5 00 AA
AB group exchange – 2 sets of data exchange	D5 11 33 A5 01 AA
AB group mode – normal mode	D5 11 33 81 00 AA
AB group mode – memory mode	D5 11 33 81 01 AA
Recurrence rate adjustment – horizontal direction - decrease	D5 11 33 B8 00 AA
Recurrence rate adjustment – horizontal direction – increase	D5 11 33 B8 01 AA
Recurrence rate adjustment – vertical direction - decrease	D5 11 33 B8 00 AA
Recurrence rate adjustment – vertical direction – increase	D5 11 33 B8 01 AA