API Guide for MSS0811

API Guide for RS232

RS232 Connection:

Port Settings: Bps 9600, Data bits 8, Parity None, Stop Bits 1, Flow Control None

Communication Protocol: The protocol has 3 formats as below. It is sent as ASCII Code and not processed back (no feedback results)

[x]v[y]. Connect Input “x” with Output “y”

[x]v[y],[z]. Connect Input “x” with Output “y” and “z”

[x]all. Connect Input “x” with all Outputs

Examples:

1v2. Input 1 to Output 2

1v2,3,4,5. Input 1 to Outputs 2,3,4,5

5all. Input 5 to All Outputs

all#. All channels correspond one by one

- All instructions must end with a “.”
- With the “v” format multiple outputs can be assigned to a single input |
- “all” always represents Output Channels
- Only one input can be routed with each command line

Configuration and Control API Guide for LAN

Description: This document describes the AVMATRIX Matrix Switch Configuration and Control API (OMSCC API). The API uses HTTP UDP packet transmissions utilizing both broadcast and unicast addresses.

All AVMATRIX Matrix Switchers are shipped with the OMSCC API pre-installed. This API can be used in C++, C#, Java, IOS, etc. There is a full C# example application that can be complied in Microsoft Visual Studio at the end of this User Guide.

Locating a Switcher on the Network

Method: UDP Broadcast

Packet Format: a56c140081ff0100000000000000000000ffa503

Destination Address: Broadcast 255.255.255.255

Destination Port: 7000

Response Payload:

aA56c230082ff0100000000000000000000ff004d5353303831312d102d43043155a906ae (hex)

The above red marked 82 indicate the device type 0x82, means matrix switcher.

The above red marked 00 indicate data return succeed.

The above green marked 4D 53 53 30 38 31 31 2D 10 2D 43 04 31 55 indicates that this is the AVMATRIX 8x8 Matrix Switcher. Different matrix switcher will return different codes.

Configuring Output Ports

Description:

The following commands configure the output ports to output based on the configured input port.

Method: UDP Unicast

Destination Address: IP address of the matrix switcher

Destination Port: 7000

Commands Table: All commands must be must be sent as ASCII code to the IP address of the matrix switch on port 7000.

[x]v[y]. Connect Input “x” with Output “y”

[x]v[y],[z]. Connect Input “x” with Output “y” and “z”

[x]all. Connect Input “x” with all Outputs

Examples:

1v2. Input 1 to Output 2

1v2,3,4,5. Input 1 to Outputs 2,3,4,5

5all. Input 5 to All Outputs

all#. All channels correspond one by one

- All instructions must end with a “.”
- With the “v” format multiple outputs can be assigned to a single input
- “all” always represents Output Channels
- Only one Input can be routed with each command line
- Response Payload – none

Query Status of Ports

Description: The following command obtains the status of each of the output ports

Method: UDP Unicast

Packet Format: a56c1400820101000000000000000000053fc01ae

Destination Address: IP address of the matrix switcher

Destination Port: 7000

Response Payload:

Status bits for each port are obtained in the response payload as: Port 1 = bit 18, Port 2 = bit 19….Port 8 = bit 25

Example 1: a561e0082010100000000000000000005300101010101010101000e02ae (hex)

The above red marked 0101010101010101 indicate the status of the switcher is that all outputs come from input 1

Example 2: a561e0082010100000000000000000005300102030405060708000e02ae (hex)

The above red marked 0102030405060708 indicate the status of the switcher is that all outputs come from inputs corresponding one by one.