

# 16X16 HDMI matrix communication protocol

## 1. RS232 Serial port:

Baud rate: 9600 bps  
 Stop bits: 1 bit  
 Data bits: 8 bits  
 Parity: None  
 Flow control: No

## 2. LAN port:

Default IP address: 192.168.1.10  
 Default Port: 5000  
 Default Gate way: 192.168.1.1  
 Default Mask address: 255.255.255.0

## 3. Command strings

### 3.1 Matrix control commands

Index	Command strings	Parameter description	Remark	Direction
1	MT00SW0000NT		Mirrored output 1 → 1, 2 → 2...	PC → Matrix
2	MT00SW <u>XX</u> 00NT	<u>XX</u> is the input port number (digits 01~16)	1 input to all outputs	PC → Matrix
3	MT00SW <u>XXYY</u> NT	<u>XX</u> is the input port number (digits 01~16); <u>YY</u> is the output port number (digits 01~16);	Connect input <u>XX</u> to output <u>YY</u>	PC → Matrix
4	MT00RD0000NT		Request Matrix return current connection status. (The returned format are described in index 9)	PC → Matrix
5	MT00RD01 <u>XX</u> NT	<u>XX</u> is the digits 01~08, means number 1 to number 8 preset connections	Load number <u>XX</u> preset connection and configure current connection	PC → Matrix
6	MT00SV00 <u>XX</u> NT	<u>XX</u> is the digits 01~08, means number 1 to number 8 preset connections	Save current connection to number <u>XX</u> preset connection	PC → Matrix
7	MT00BZEN01NT		Mute buzzer	PC → Matrix
8	MT00BZEN00NT		Unmute buzzer	PC → Matrix
9	LINK:O <u>Y</u> <u>X</u> :END	<u>X</u> is the input port number (digits 1~9,A,B,C~G); <u>Y</u> is the output port number (digits 1~9,A,B,C~G);	Matrix return current connection status to console	Matrix → PC

### 3.2 Matrix Configuration commands

### 3.2.1 Settings via RS232 connection

Index	Command strings	Parameter description	Remark	Direction
1	MT8003IP?		For RS232 connection only. Query matrix's current IP address	PC → Matrix
2	MT8003PT?		For RS232 connection only. Query matrix's current port number address	PC → Matrix
3	MT8003GW?		For RS232 connection only. Query matrix's current gate way address	PC → Matrix
4	MT8003MA?		For RS232 connection only. Query matrix's current mask address	PC → Matrix
5	IP: <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current IP address	Matrix → PC
6	PT: <u>XXXXX</u> ;	<u>XXXXX</u> is 00000~65535 digits.	Feed back the matrix's current port number	Matrix → PC
7	GW: <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current gate way address	Matrix → PC
8	MA: <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current mask address	Matrix → PC
9	MT8019IP: <u>AAA</u> . <u>BBB</u> . <u>CC</u> <u>C</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For RS232 connection only. Change the matrix's current IP address to AAA.BBB.CCC.DDD	PC → Matrix
10	MT8009PT: <u>XXXXX</u> ;	<u>XXXXX</u> are the 00000~65535 digits numbers	For RS232 connection only. Change the matrix's current port number to XXXXX	PC → Matrix
11	MT8019GW: <u>AAA</u> . <u>BBB</u> . <u>CC</u> <u>C</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For RS232 connection only. Change the matrix's current gate way address to AAA.BBB.CCC.DDD	PC → Matrix
12	MT8019MA: <u>AAA</u> . <u>BBB</u> . <u>CC</u> <u>C</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For RS232 connection only. Change the matrix's current mask address to AAA.BBB.CCC.DDD	PC → Matrix

### 3.2.2 Settings via LAN connection

Index	Command strings	Parameter description	Remark	Direction
1	IP?		For LAN connection only. Query matrix's current IP address	PC → Matrix
2	PT?		For LAN connection only. Query matrix's current port number address	PC → Matrix
3	GW?		For LAN connection only. Query matrix's current gate way address	PC → Matrix
4	MA?		For LAN connection only. Query matrix's current mask address	PC → Matrix
5	IP : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current IP address	Matrix → PC
6	PT : <u>XXXXXX</u> ;	<u>XXXXXX</u> is 00000~65535 digits.	Feed back the matrix's current port number	Matrix → PC
7	GW : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current gate way address	Matrix → PC
8	MA : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	Feed back the matrix's current mask address	Matrix → PC
9	IP : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For LAN connection only. Change the matrix's current IP address to AAA.BBB.CCC.DDD	PC → Matrix
10	PT : <u>XXXXXX</u> ;	<u>XXXXXX</u> are the 00000~65535 digits numbers	For LAN connection only. Change the matrix's current port number to XXXXX	PC → Matrix
11	GW : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For LAN connection only. Change the matrix's current gate way address to AAA.BBB.CCC.DDD	PC → Matrix
12	MA : <u>AAA</u> . <u>BBB</u> . <u>CCC</u> . <u>DDD</u> ;	<u>AAA.BBB.CCC.DDD</u> are the 000~255 digits numbers	For LAN connection only. Change the matrix's current mask address to AAA.BBB.CCC.DDD	PC → Matrix