8X8 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	MT00SWXX00NT	XX is the input port number (digits 01~08)	1 input to all outputs	PC → Matrix
3	MT00SWXXYYNT	XX is the input port number (digits 01~08) ; YY is the output port number (digits 01~08) ;	Connect input XX to output YY	PC → Matrix
4	MT00RD0000NT		Request Matrix return current connection status. (The returned format are described in index 9)	PC → Matrix
5	MT00RD01XXNT	XX is the digits 01~08，means number 1 to number 8 preset connections	Load number XX preset connection and configure current connection	PC → Matrix
6	MT00SV00XXNT	XX is the digits 01~08 , means number 1 to number 8 preset connections	Save current connection to number XX preset connection	PC → Matrix
7	MT00BZEN01NT		Mute buzzer	PC → Matrix
8	MT00BZEN00NT		Unmute buzzer	PC → Matrix
9	LINK:OYIX;END	X is the input port number (digits 1~8) ; Y is the output port number (digits 1~8) ;	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:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current IP address	Matrix → PC
6	PT:**XXXXX**;	**XXXXX** is 00000~65535 digits.	Feed back the matrix's current port number	Matrix → PC
7	GW:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current gate way address	Matrix → PC
8	MA:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current mask address	Matrix → PC
9	MT8019IP:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** 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:**XXXXX**;	*XXXXX* are the 00000~65535 digits numbers	For RS232 connection only. Change the matrix's current port number to XXXXX	PC → Matrix
11	MT8019GW:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** 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:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD**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

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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:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current IP address	Matrix → PC
6	PT:**XXXXX**;	**XXXXX** is 00000~65535 digits.	Feed back the matrix's current port number	Matrix → PC
7	GW:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current gate way address	Matrix → PC
8	MA:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** are the 000~255 digits numbers	Feed back the matrix's current mask address	Matrix → PC
9	IP:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** 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:**XXXXX**;	*XXXXX* are the 00000~65535 digits numbers	For LAN connection only. Change the matrix's current port number to XXXXX	PC → Matrix
11	GW:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD** 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:**AAA**.**BBB**.**CCC**.**DDD**;	**AAA**.**BBB**.**CCC**.**DDD**are the 000~255 digits numbers	For LAN connection only. Change the matrix's current mask address to AAA.BBB.CCC.DDD	PC → Matrix