

Draft of WIZ107/108SR Configuration Tool Communication Protocol

V1.00

Message format

The prefix of setting message (commands vector) is defined as follow.
If broadcast, the MAC address will be 6 bytes 0xFF, otherwise, it will be the MAC address of the S2E device.

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|---|---|---------------------------------|----|----|------------|
| M | A | MAC Address (6 Bytes in binary) | \r | \n | PW Command |
|---|---|---------------------------------|----|----|------------|

The format of one command is shown as follow figure. The 'Command' is two bytes and the length of 'Data' field is variable. The 'Data' field can be null which means to request the value of the command, and this kind of command can only be used in the 'Search' function of configuration tool.

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|---------|------|----|----|
| Command | Data | \r | \n |
|---------|------|----|----|

Command list

| Command | Data | Memo |
|---------|-------------------------------------|---|
| MC | 00:08:DC:14:00:00 | MAC address |
| VR | 1.0 | Firmware version (Read only) |
| MN | WIZ107SR, or WIZ108SR... | Model name |
| ST | Opened(0)/Connected(1)/Upgrading(2) | Device status |
| IM | STATIC(0)/DHCP(1)/PPPOE(2) | Obtain IP method |
| OP | CLIENT(0)/SERVER(1)/MIXED(2)/UDP(3) | Operation mode |
| DD | ENABLE(1)/DISABLE(0) | DDNS enable or disable flag |
| CP | ENABLE(1)/DISABLE(0) | Connection password enable/disable flag |
| PO | RAW(0)/TELNET(1) | Protocol, raw or telnet |
| DG | ENABLE(1)/DISABLE(0) | Debug message output flag |
| KA | ENABLE(1)/DISABLE(0) | Keep alive flag |
| KI | # | Tx KeepAlive interval (0~65535ms) |
| KE | # | KeepAlive enable interval (0~65535ms) |

| | | |
|----|------------------------------|--|
| RI | # | Reconnection interval (client mode, 0~65535ms) |
| LI | | Local IP address |
| SM | | Subnet mask |
| GW | | Gateway |
| DS | | DNS server IP |
| PI | | PPPoE ID |
| PP | | PPPoE password |
| DX | | DDNS server domain name |
| DP | | DDNS port |
| DI | | DDNS ID |
| DW | | DDNS password |
| DH | | DDNS host name |
| LP | | Local port |
| RP | | Remote host port |
| RH | | Remote host IP/name |
| BR | 1200(0)/2400(1)... | Baud rate (refer to index) |
| DB | 7(0)/8(1)/9(2) | Data bit |
| PR | NONE(0)/ODD(1)/EVEN(2) | parity |
| SB | 1(0) | Stop bit |
| FL | NONE(0)/XONXOFF(1)/CTSRTS(2) | Flow |
| IT | | Inactivity timer (0~65535ms) |
| PT | | Serial data packing interval (0~65535ms) |
| PS | | Packing size(0~255) |
| PD | | Packing indicator(0~255) |
| TE | Enable(1)Disable(0) | Software trigger enable flag |
| SS | | software trigger (fixed 3 bytes) |
| NP | | Connection password (Max. 8 bytes) |
| SP | | Search password (Max. 8 bytes) |
| LG | | Debug log message |
| ER | | Error message |
| SV | -- | Save setting message |
| RT | -- | Reboot the device |
| UN | 0~F | UART counter |

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|----|--------------------|-------------------------------------|
| EX | -- | Exit from command mode |
| FR | -- | Factory Reset |
| | | |
| FW | Len(firmware)\r\n | Firmware upload command |
| MA | 6bytes MAC address | Binary |
| PW | | Search password info (max. 8 bytes) |

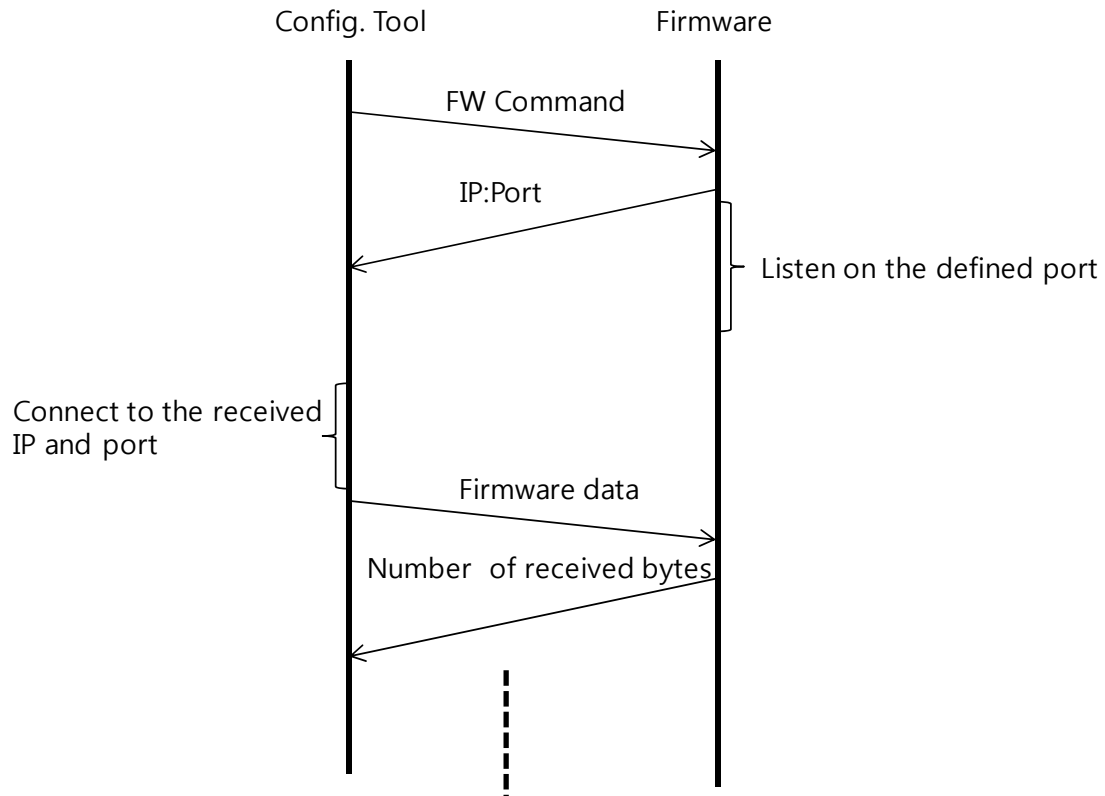
| Index | Baud Rate |
|-------|-----------|
| 0: | 300 |
| 1: | 600 |
| 2: | 1200 |
| 3: | 1800 |
| 4: | 2400 |
| 5: | 4800 |
| 6: | 9600 |
| 7: | 14400 |
| 8: | 19200 |
| 9: | 28800 |
| 10: | 38400 |
| 11: | 57600 |
| 12: | 115200 |
| 13: | 230400 |

| Index | Data bit |
|-------|----------|
| 0: | 7 |
| 1: | 8 |
| 2: | 9 |

| Index | Stop bit |
|-------|----------|
| 0: | 1 |

Firmware upload protocol

Using UDP to broadcast FW upload command, when a S2E receives FW command, it will compare its MAC address with the one in FW command. If the same, the S2E will send "IP:Port" to configuration tool. Then, the configuration tool will connect with the received IP and port.



TCP/UDP port

| | |
|-----------------------|-------------|
| UDP broadcast: | 50001 |
| TCP direct searching: | 50001 |
| *Firmware uploading: | 50002 (TCP) |