

Hello,

I got your configuration and did a test to measure delay. My test shows that delay below 1 milliseconds.

Could you tell me how you measured delay?

Or you can do bellow steps to measure the delay:

Connect CSE-M73 to PC via Ethernet and RS-232 to create a loop. Delay will be measure from data going out PC via network card (Start time) to da come back PC via RS-232 (End time).

Note:

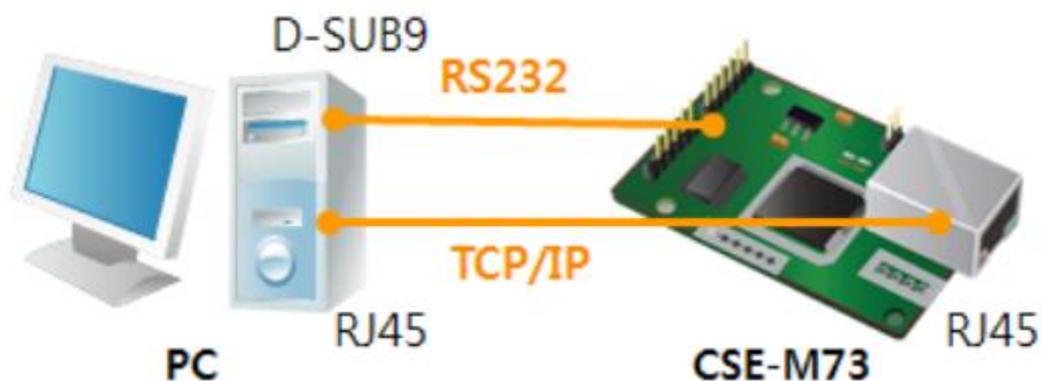
- Data sent via RS-232 and TTL are the same. They only differ from signal level; therefore we can measure delay via RS-232 (PC does not have TTL interface).
- In case if your PC doesn't have a RS232 port, use a USB to RS232 cable.

Start time: using Wireshark to see the time data going out.

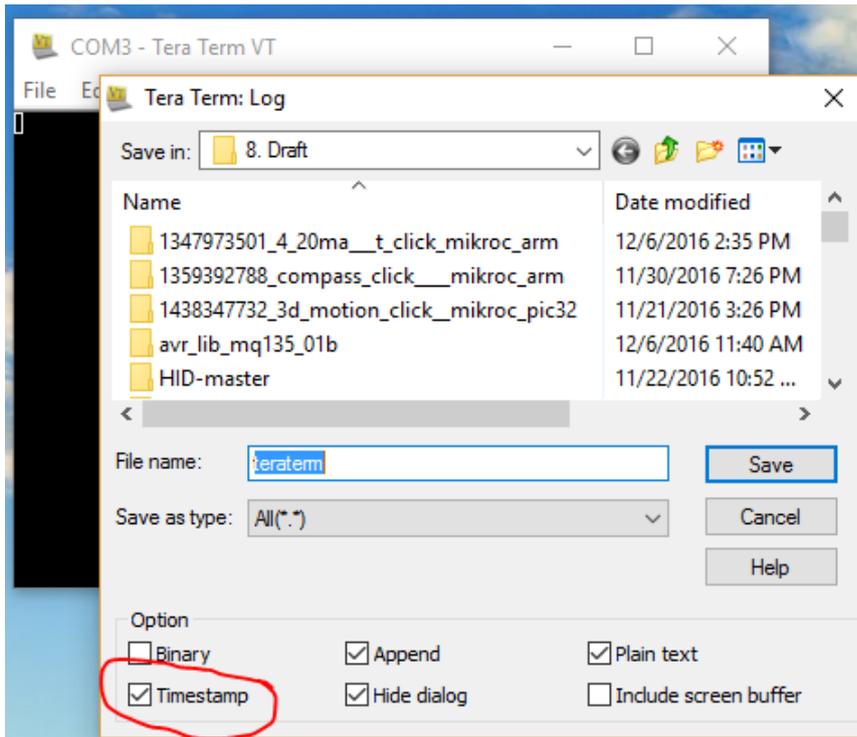
End time: using Tera Term to receive serial data and log time stem to log file

Delay = end time – start time.

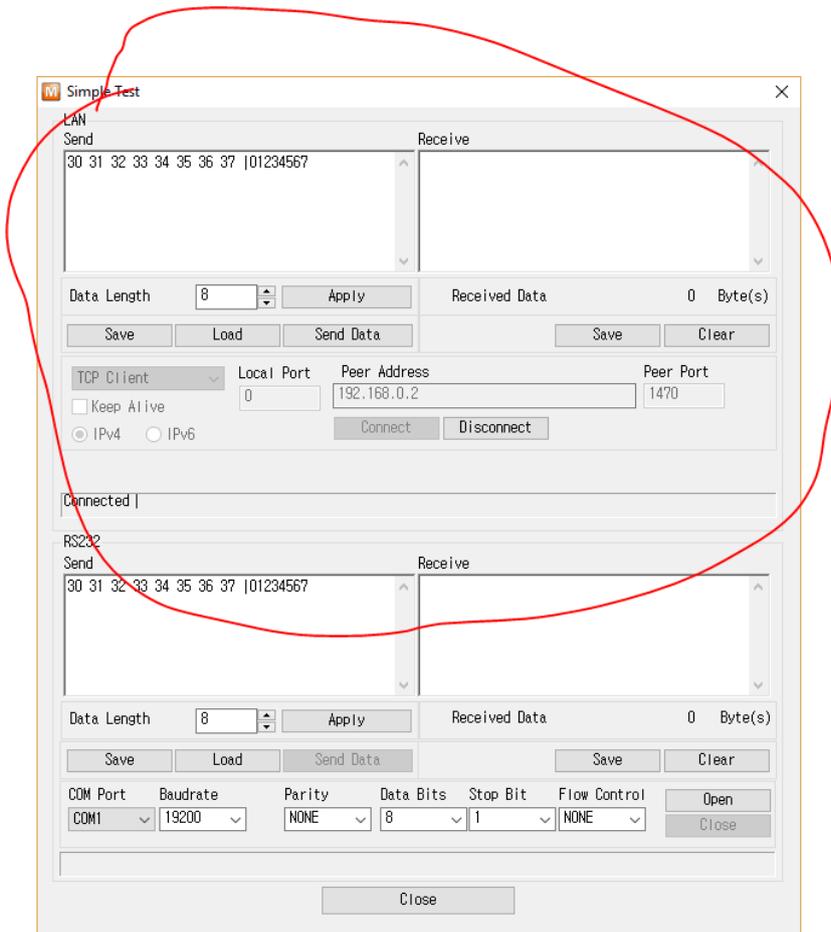
(See below image for connecting and configure software)



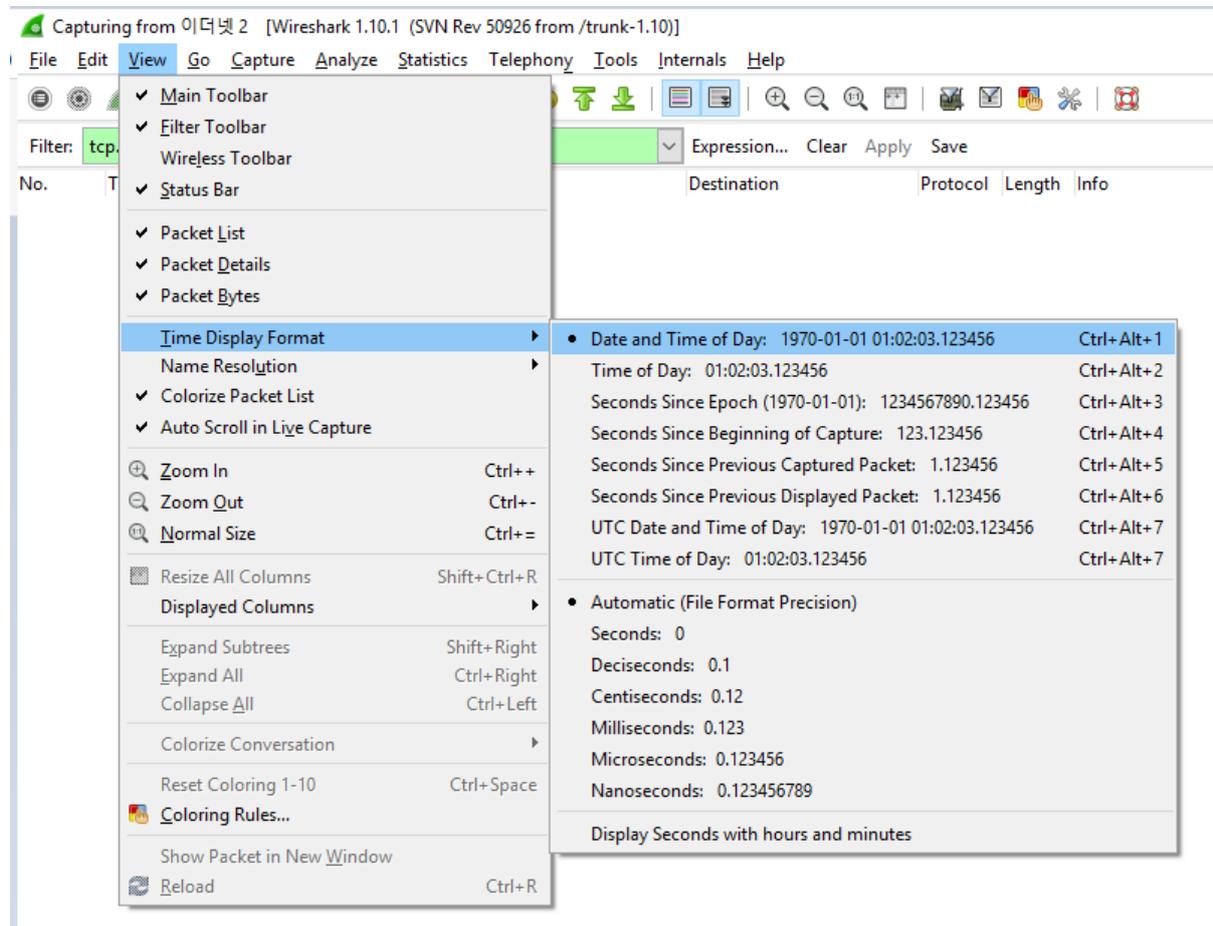
Config Tera Term to receive data and see time stamp of incoming data.



Using Simple Test function on ezManager to send data



Config WireShark to see time stamp



Result: open teraterm.log to see end_time stamp and check on Wireshark to see start_time stamp.

The screenshot displays a Wireshark interface capturing network traffic on interface '이더넷 2'. The filter is set to 'tcp.port == 1470'. The packet list shows a series of TCP packets from 192.168.0.3 to 192.168.0.2. Packet 38 is highlighted, showing a SYN packet with sequence number 619278000. The packet details pane shows the Ethernet II and TCP layers. A 'Simple Test' window is open, showing a data length of 8 and a peer address of 192.168.0.2. A Notepad window shows the timestamp '[Wed Dec 07 15:08:37.620 2016] 01234567' circled in red. A COM3 - Tera Term VT window is also open, showing the same timestamp and data.

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|-------------------------------|-------------|-------------|----------|--------|-------------------------------------|
| 35 | 2016-12-07 15:08:35.780305000 | 192.168.0.3 | 192.168.0.2 | TCP | 66 | 55740 > uaiact [SYN] Seq=0 win=8192 |
| 36 | 2016-12-07 15:08:35.781244000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | uaiact > 55740 [SYN, Seq=0 win=0 |
| 37 | 2016-12-07 15:08:35.781245000 | 192.168.0.3 | 192.168.0.2 | TCP | 54 | 55740 > uaiact [ACK] |
| 38 | 2016-12-07 15:08:37.619278000 | 192.168.0.3 | 192.168.0.2 | TCP | 62 | 55740 > uaiact [PSH, Seq=619278000 |
| 39 | 2016-12-07 15:08:37.635431000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | uaiact > 55740 [ACK] |
| 40 | 2016-12-07 15:08:47.616389000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | [TCP Keep-Alive] uaia |
| 41 | 2016-12-07 15:08:47.616492000 | 192.168.0.3 | 192.168.0.2 | TCP | 54 | [TCP Keep-Alive ACK] |
| 42 | 2016-12-07 15:08:57.616969000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | [TCP Keep-Alive] uaia |
| 43 | 2016-12-07 15:08:57.617072000 | 192.168.0.3 | 192.168.0.2 | TCP | 54 | [TCP Keep-Alive ACK] |
| 46 | 2016-12-07 15:09:07.617984000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | [TCP Keep-Alive] uaia |
| 47 | 2016-12-07 15:09:07.617984000 | 192.168.0.3 | 192.168.0.2 | TCP | 54 | [TCP Keep-Alive ACK] |
| 81 | 2016-12-07 15:09:17.619041000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | [TCP Keep-Alive] uaia |
| 82 | 2016-12-07 15:09:17.619120000 | 192.168.0.3 | 192.168.0.2 | TCP | 54 | [TCP Keep-Alive ACK] |
| 83 | 2016-12-07 15:09:27.619629000 | 192.168.0.2 | 192.168.0.3 | TCP | 60 | [TCP Keep-Alive] uaia |
| 84 | 2016-12-07 15:09:27.619729000 | 192.168.0.2 | 192.168.0.2 | TCP | 54 | [TCP Keep-Alive] uaia |
| 112 | 2016-12-07 15:09:27.619729000 | 192.168.0.3 | 192.168.0.2 | TCP | 60 | [TCP Keep-Alive] uaia |
| 113 | 2016-12-07 15:09:27.619729000 | 192.168.0.2 | 192.168.0.3 | TCP | 54 | [TCP Keep-Alive ACK] |

The difference is below 1 millisecond.