



When the display of the monitor result is wrong...



~ Information 001: How to ease the "misinsertion display" of the monitor result. ~

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*Note: The "Information xxx" is the document which provides information about the important item that we can't do description easily in FAQ in many questions which we got from the customers.

[Introduction]

The way that the following behavior that we got many question in the past technical support about the Serial Port Monitor and Analyzer (Model: AKM-RSM-100) is eased will be described here.

Behavior: Communications data are displayed by the misinsertion as the monitor result.

[Outline]

In the Serial Port Monitor and Analyzer (Model: AKM-RSM-100) being made as the application software, Communications data (data from the DTE side device and data from the DCE side device) may be displayed by the misinsertion as the monitor result by the timing when communications data are delivered from Windows API. This is unavoidable behavior by the structure of the application.

The reason of this behavior is explained in the "Advanced Settings Manual" of the Serial Port Monitor and Analyzer.

But, because the "Advanced Settings Manual" is the detailed manual, there is much description of the mechanism in this manual. Therefore, many customers seem to have the question of "What should I do after all?"

This behavior is the unavoidable behavior as mentioned in the above. But, when the Serial Port Monitor and Analyzer is being used with the following environment, this behavior may be able to be eased by the configuration of the [Display Adjustment] in the [Setting of the Advanced Options].

Environment: The Line Monitor (and the Debug Support Functions) when communications with the DTE device and the DCE device is sequential communications.

***Note: Especially, when the [Connection Type] is the [Relay Connection], there is the possibility that this behavior can be eased.**

The complicated contents like the mechanism won't be described here at all.

Then, the procedure of the configuration to ease this behavior directly will be described.

If being in trouble due to this behavior, try the configuration described to this document by all means.

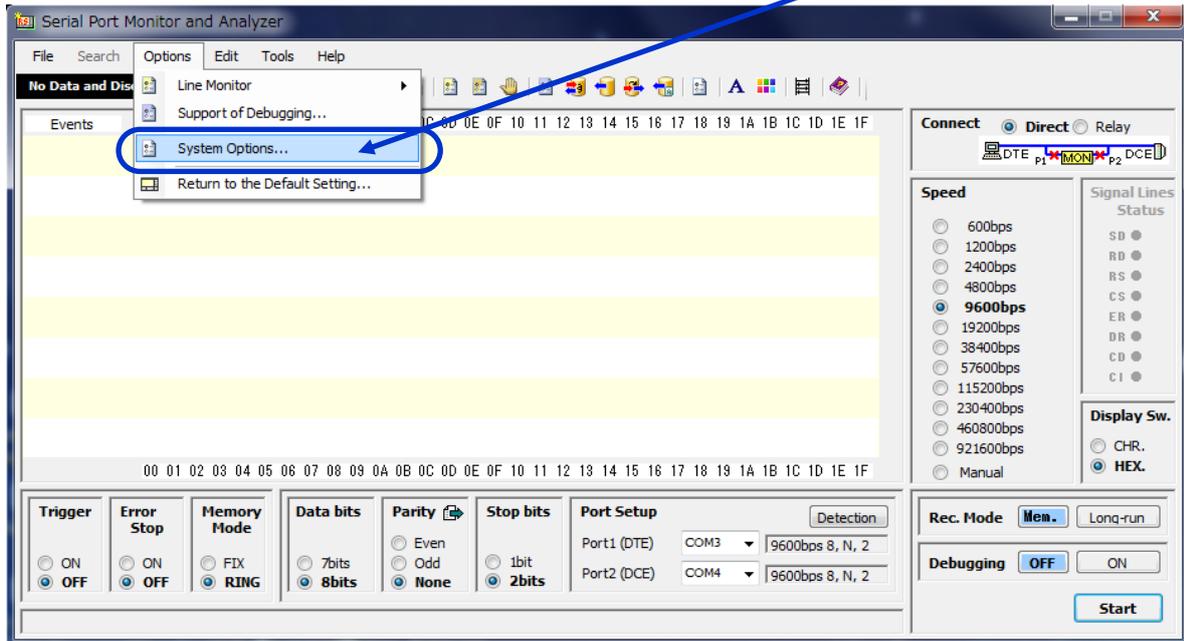
[Step 1] Setting of the Advanced Options

First, confirm the [Display Adjustment] of the Serial Port Monitor and Analyzer.

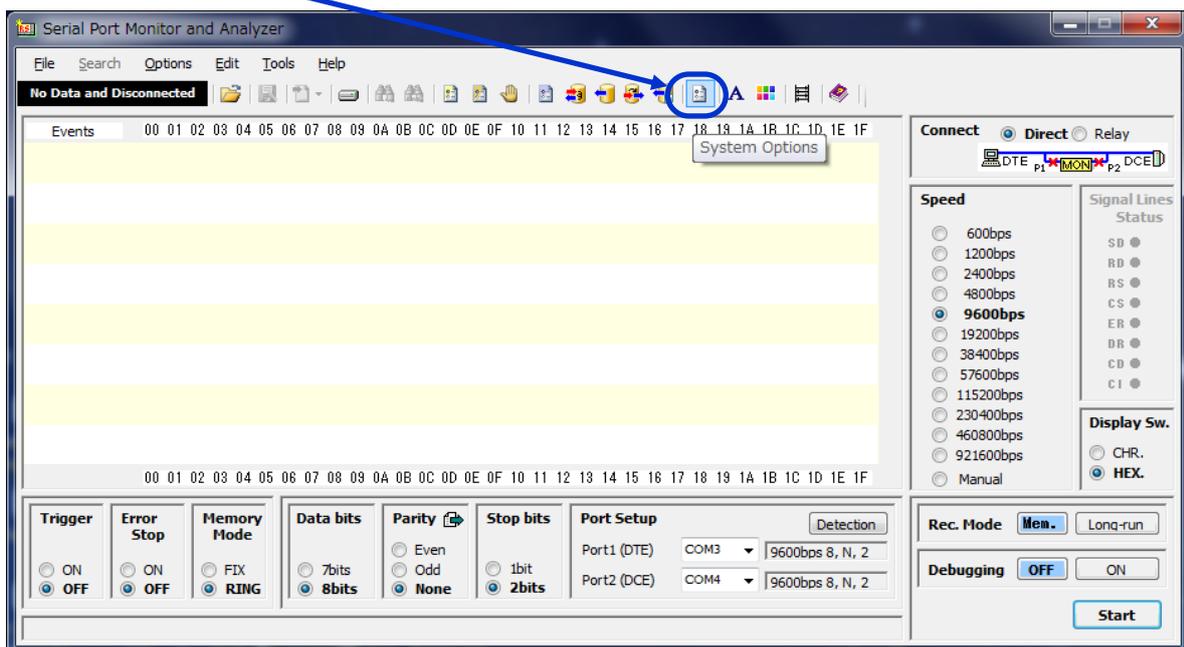
If the configuration about the [Display Adjustment] is being set up to the [Standard Adjustment] (or the [Variable Adjustment]), **change configuration to the [No Adjustment]**.

Procedure 1:

After the Serial Port Monitor and Analyzer was started, click on [Options]-[System Options] on the Menu bar.

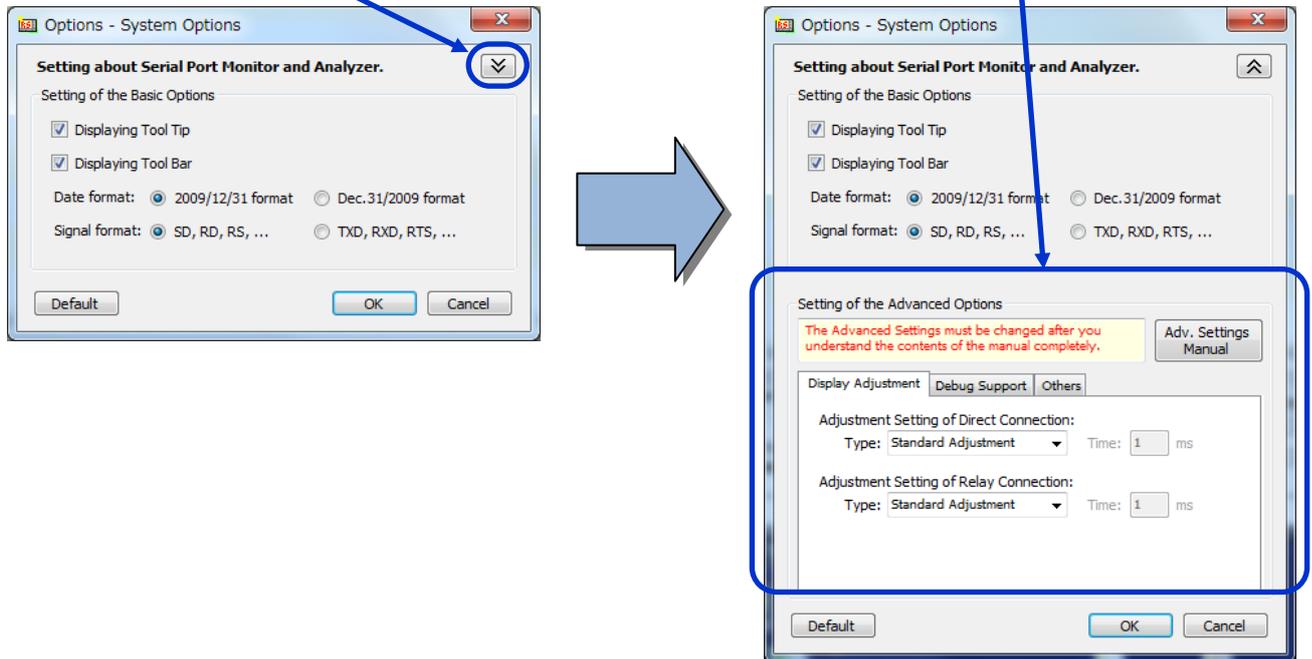


Or, click on  icon on the Tool bar.



Procedure 2:

Following [System Options] screen will be displayed. Then, [Setting of the Advanced Options] will be displayed by click on  button.



Procedure 3:

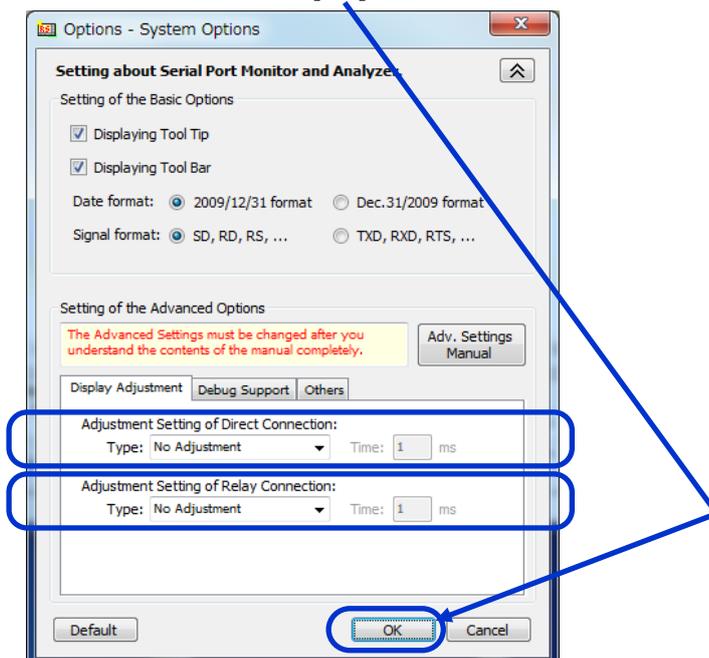
Set up **both types** of the [Display Adjustment] tab of the [Setting of the Advanced Options] to the **[No Adjustment]**.

Adjustment Setting of Direct Connection: Type: \Rightarrow **[No Adjustment]**

Adjustment Setting of Relay Connection: Type: \Rightarrow **[No Adjustment]**

Procedure 4:

Confirm that the [Display Adjustment] tab of the [Setting of the Advanced Options] was set up as follows. Then, click on [OK] button.



Configuration was completed by the above.

[Step 2] Setting of the Device Driver

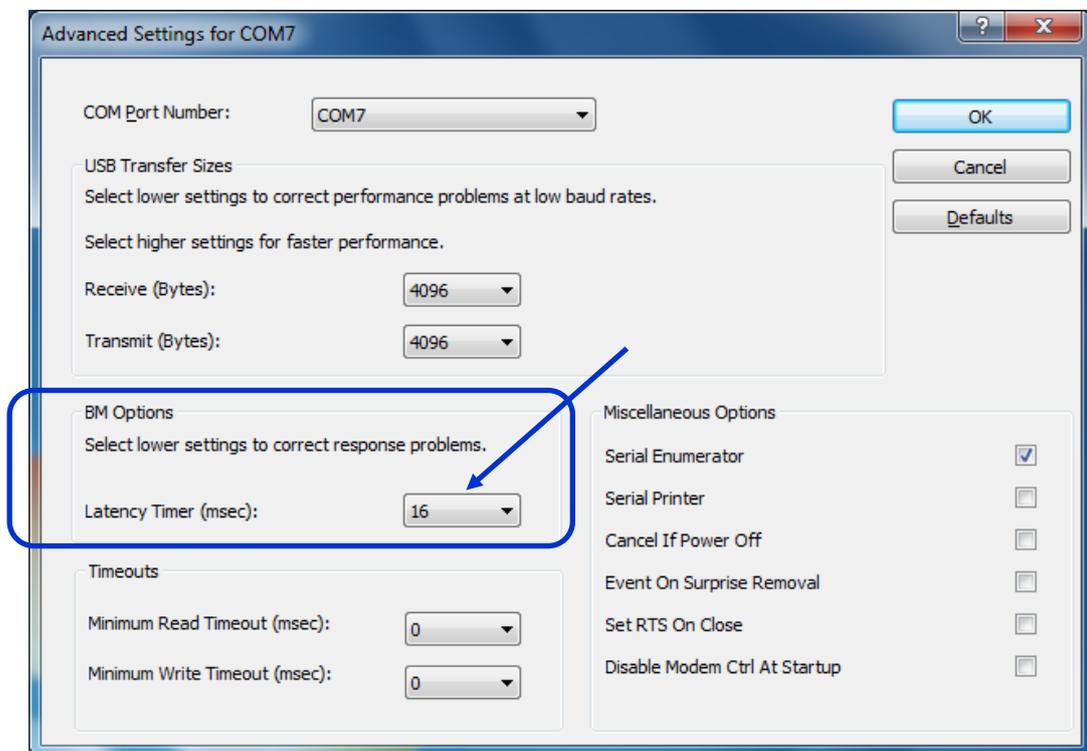
As the other way, this behavior may be able to be eased by using high performance processing (It is not the "faster performance".) by the Device Driver configuration of the Serial Ports (USB-Serial conversion cables.).

The configuration method of the USB-Serial conversion cable which FTDI chip and Prolific chip are being used for will be described here.

***Note:** This configuration should be done after the [Step 1].
There won't be effect even if this configuration is done without doing the [Step 1].

2-1: In the case of the USB-Serial conversion cable which "FTDI chip" is being used for

Open the device manager of Windows. Then, open the [Advanced] of the [Port Settings] from property of the COM port.



Set up the value of the [Latency Timer] of the [BM Option] to the small value. (Default is 16ms.)

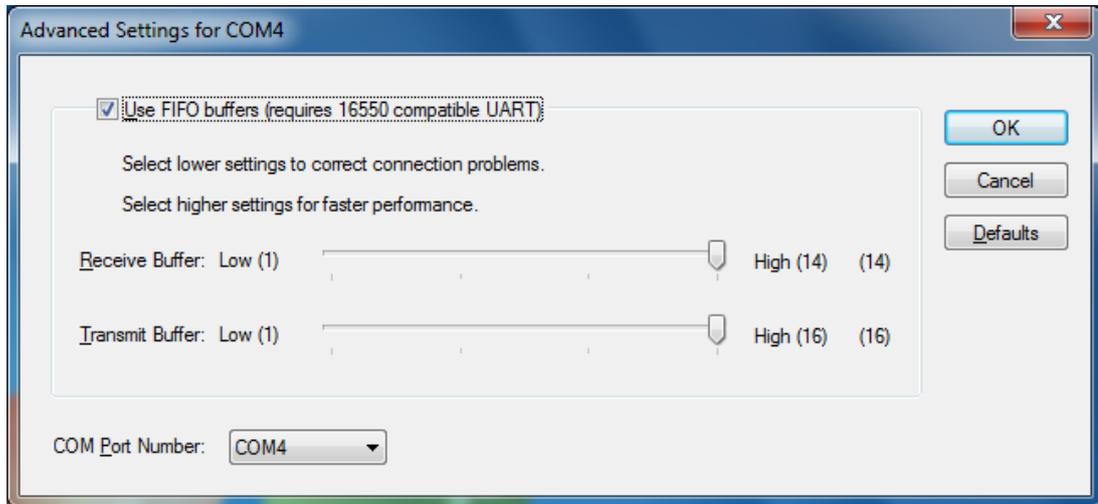
***Note:** However, much short data string will be forwarded to the USB bus when this value is set up to the small value. Then, the frequency of the interrupt will increase. Therefore, PC will have the high load.
Set up the [Latency Timer] corresponding to the ability of your PC.

Complete configuration by clicking on [OK]. (Restart may be necessary.)

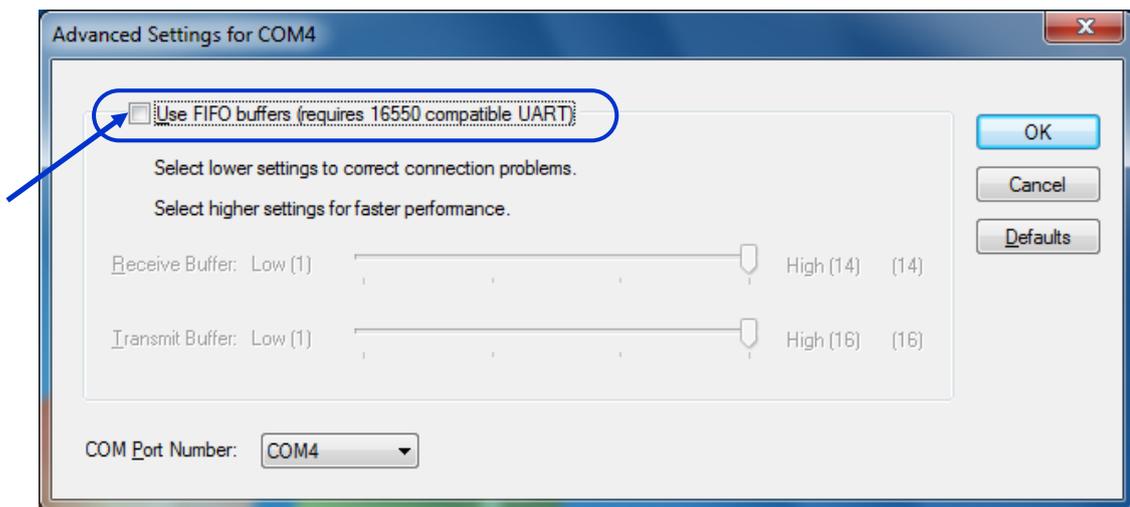
***Note:** Do the same configuration about all the serial port used by the Serial Port Monitor and Analyzer.

2-2: In the case of the USB-Serial conversion cable which "Prolific chip" is being used for

Open the device manager of Windows. Then, open the [Advanced] of the [Port Settings] from property of the COM port.



Remove the check of the [User FIFO buffers (requires 16550 compatible UART)].



Complete configuration by clicking on [OK]. (Restart may be necessary.)

***Note: Do the same configuration about all the serial port used by the Serial Port Monitor and Analyzer.**

2-3: In the case of the other USB-Serial conversion cable

In the case of the USB-Serial conversion cable which other chip is being used for, open the device manager of Windows. Next, search the configuration to be forwarded communications data as directly as possible. Then, try actuation by using that configuration.

***Note: Do the same configuration about all the serial port used by the Serial Port Monitor and Analyzer.**