Test Program For F53 BDU
Operation Manual

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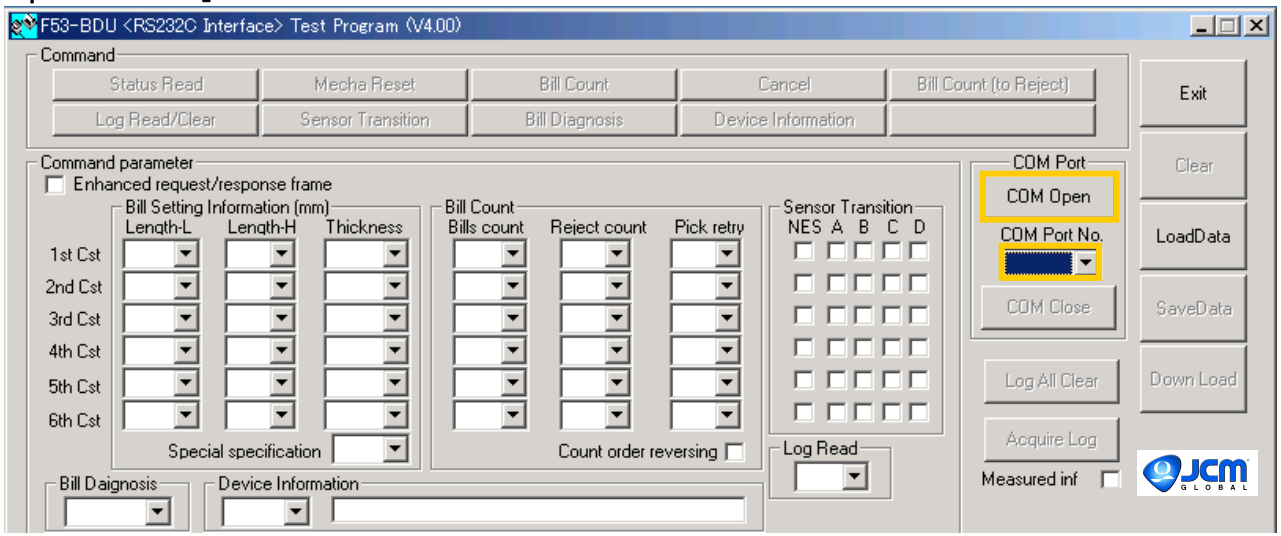
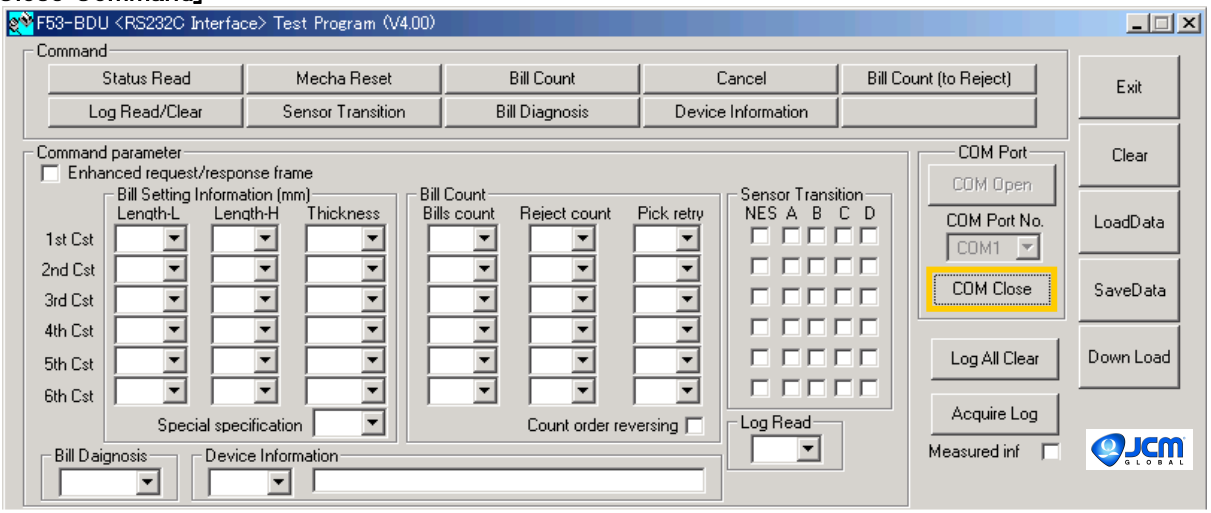
[1.Serial Communication Command]

[1-1.Com Open Command]



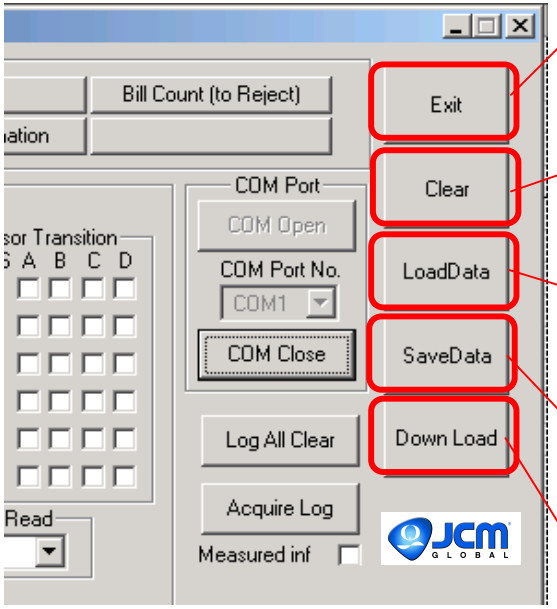
COM Open **This command opens the communication between PC and BDU with RS232C cable.**
Select an available COM port value from the pull down menu, and then press the COM Open command button to execute.

[1-2.Com Close Command]



COM Close **This command closes the communication between PC and BDU.**
Simply press the COM Close command button to execute.

[2.Bsic Command]



Exit command
As you press this button, it ends the test program.

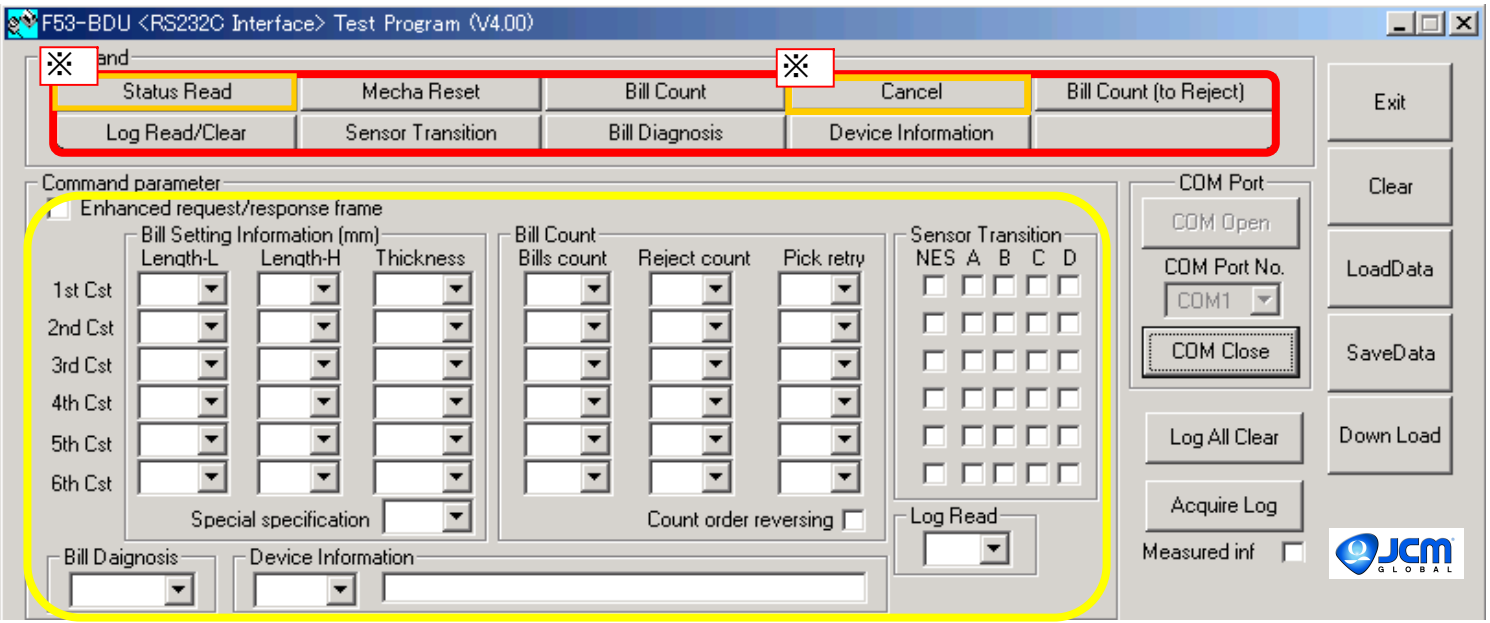
Clear command
As you press this button, it clears command response display window.

Load Data command
As you press this button, it reads parameter data from the file that you set.

Save Data command
As you press this button, it saves parameter data from the file that you set.

Down Load command
As you press this button, a new window appears. You will be asked the firmware file name that you are going to down load.

[3.Operational Commands]



*All command buttons (marked in Red) except <Status Read> and <Cancel> are corresponding to specific pull down menus (marked in Yellow) and the check box .

*You will require filling in applicable values in the specific pull down menu (or the check box) before pressing command buttons to execute these commands.
To execute <Status read> command and <Cancel> command, simply press these buttons as there are no parameter setting menu or the check box for <Status Read> and <Cancel> command.

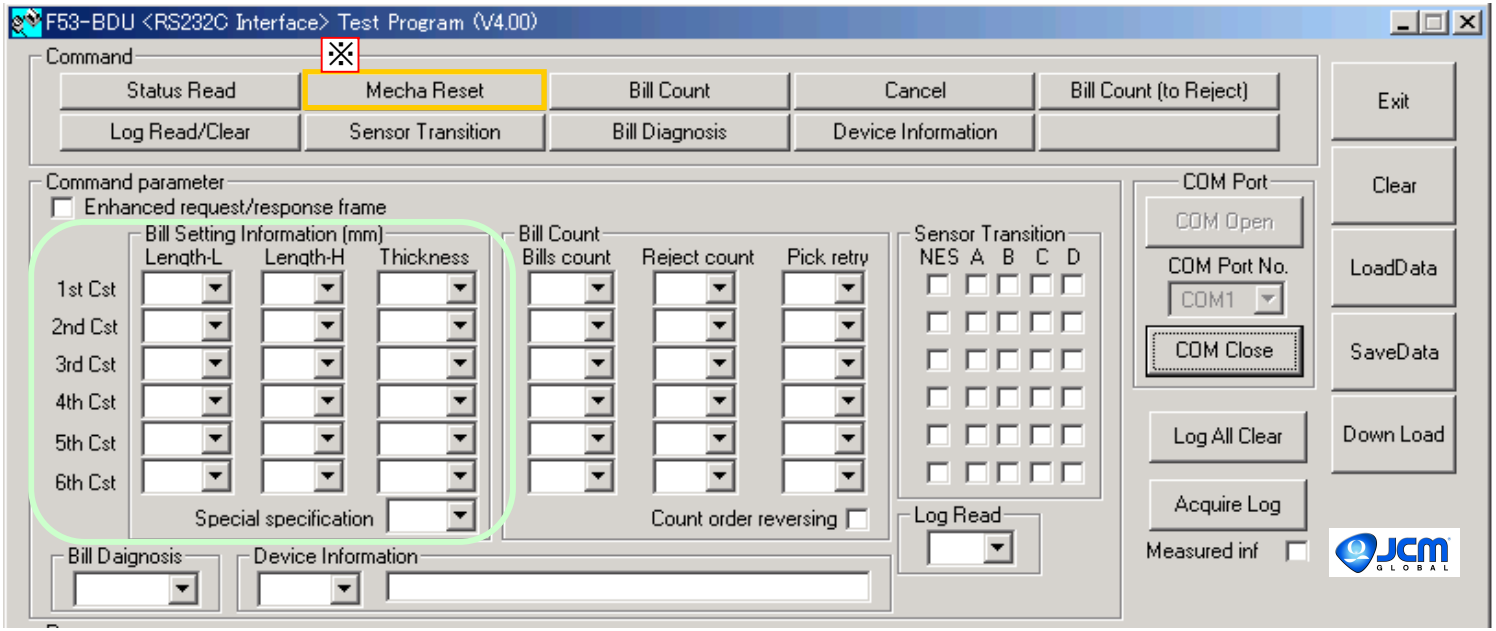
[3-1.Status Read command]

※ **This command reports the status of sensors, cassettes,and so on.**

[3-2.Cancel command]

※ **Terminate processing of a request frame.**

[3-3.Mecha reset command]

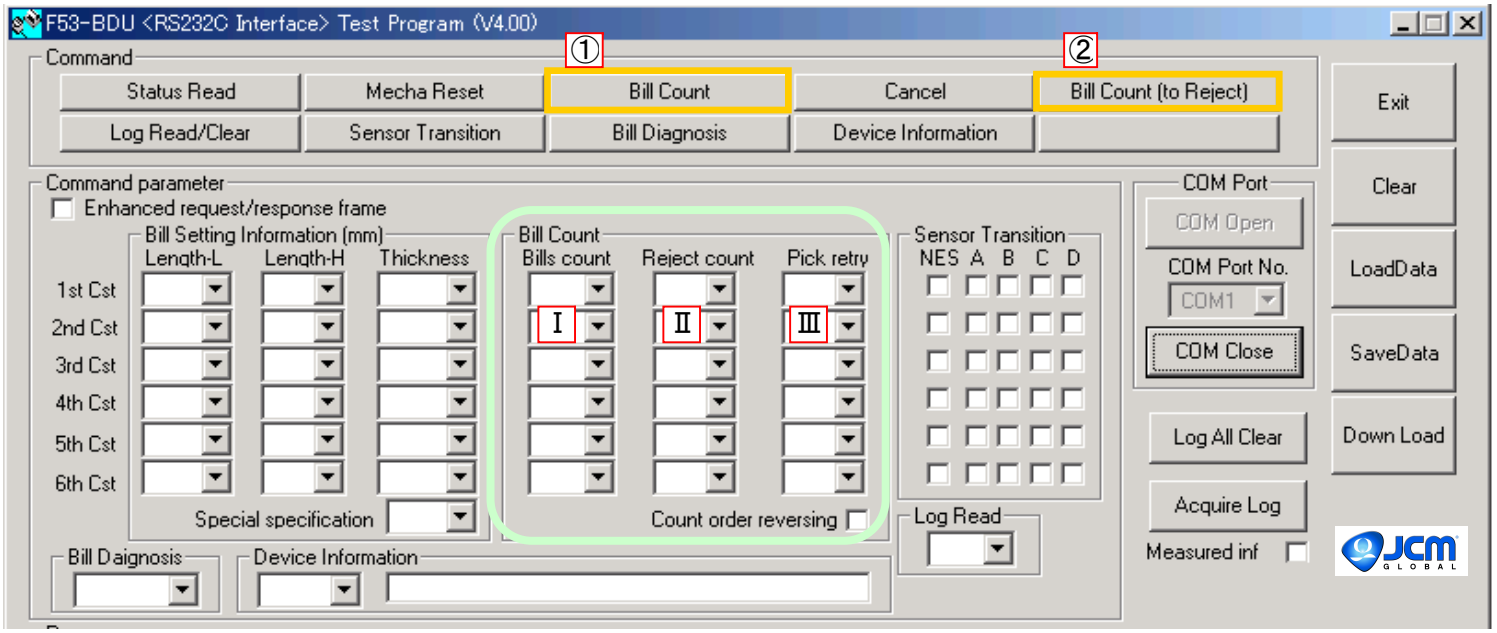


※ **Mecha Reset command** This command initializes F56-BDU and specifies bill information setting for each cassette. Calculated value must be filled in each bill paramaters, then press the MECHA RESET command button to execute the command. Before press Mecha RESET,you need to choose [Special specification:01] in case of using Australia ,New Zealand dollar(Special bills which have slit) and Mexican 50 Peso, and choose [Special specification:00] in the other ordinary cases.

Pull down menu <Length -L> = bill size(※) - 10 ex; if a bill size is 156, input the value 146.
Pull down menu <Length-H> = bill size(※) + 10 ex;if a bill size is 156, input value is 166.
Pull down menu <Thickness> = thickness of bill (※)
Pull down menu <Special specification> 00: Normal specification
01: Australia and New Zealand dollar,and Mexican 50 Peso Specification
10: Reserved

(※)You will refer to the result of Diagnosis Information to know bill size and thickness.
＊No.1 through No.6 are cassette No.

[3-4.Bill Count command]



①

Bill Count command ＊This command feeds a bill one by one from a specified cassette.

Ⅰ

Pull down menu <Number of bill count Indicate the number of bills you wish to dispense, then press the Bill Count command button to execute.

Ⅱ

Pull down menu <Number of count reject> Indicate max number of bills you wish to reject, then press the Bill Count command button to execute. (Recommend value is 10.)

Ⅲ

Pull down menu <Number of Pick retry > Indicate the number of times you wish to pick retry. (Recommend value is 2.)

②

Bill Count[to reject] command ＊This command transports bills to reject box.

Ⅰ

Pull down menu <Number of bill count > Indicate the number of bills you wish to dispense, then press the Bill Count command button to execute.

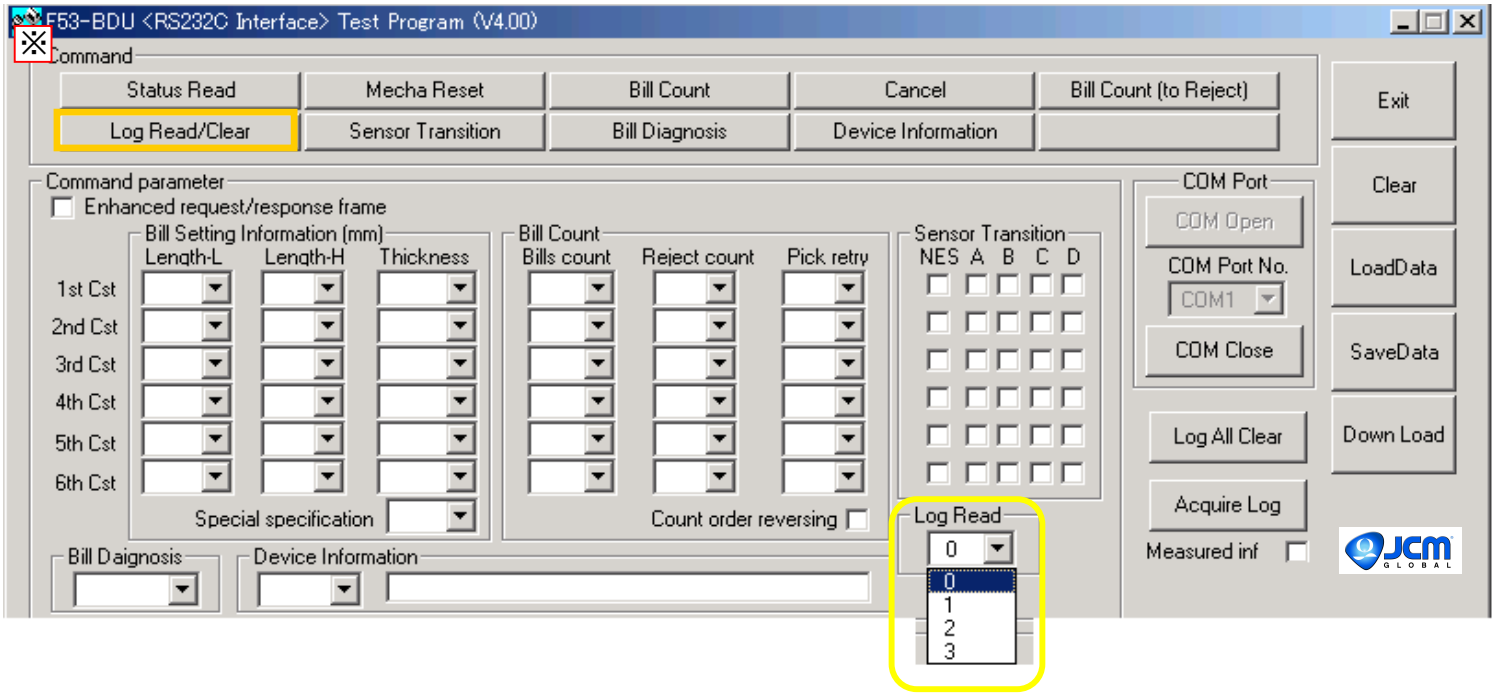
Ⅱ

Pull down menu <Number of count reject> Indicate max number of bills you wish to reject, then press the Bill Count command button to execute. (Recommend value is 10.)

Ⅲ

Pull down menu <Number of Pick retry > Indicate the number of times you wish to pick retry. (Recommend value is 2.)

[3-5. Log Read/Clear Command]



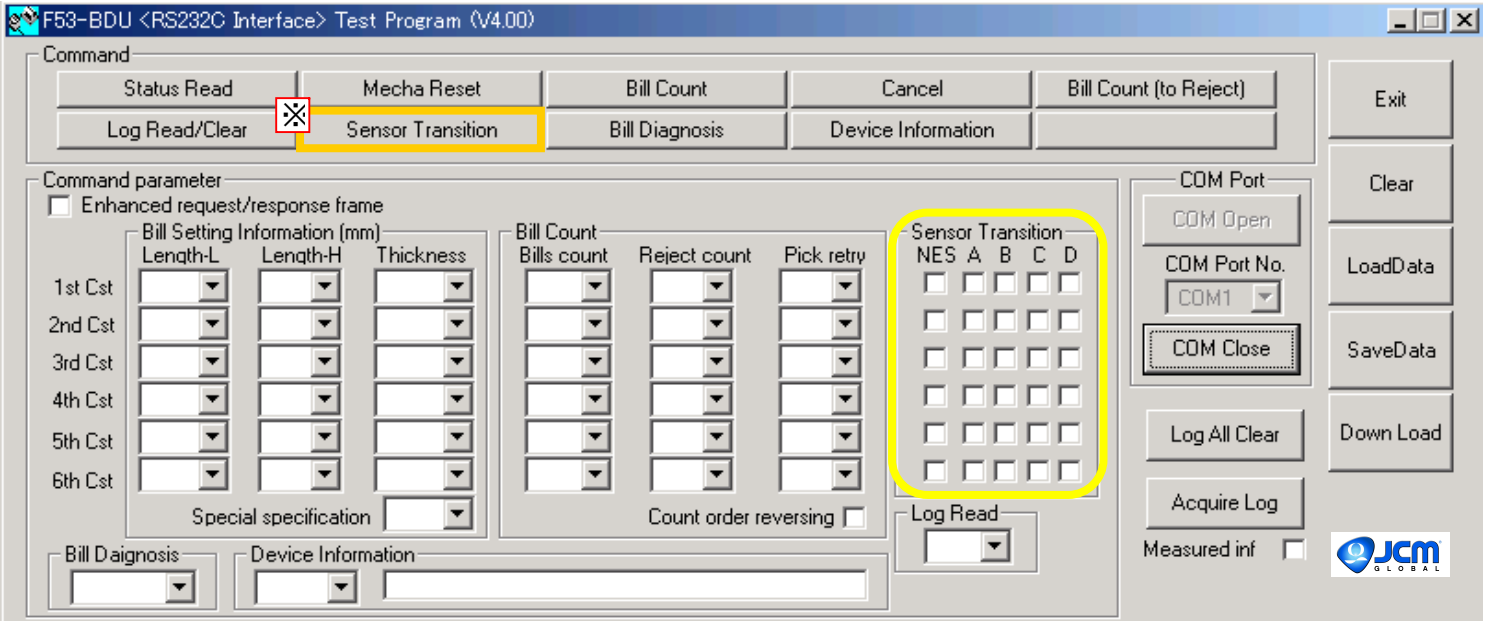
※ **Log Read command** **This command reads/clears statistics information which F53-BDU holds(For example,Error counter, Retry counter,and Pick counter).**

Select an applicable value from the pull down menu, and then press the Log Read command button to execute.

OPR(Operation Type)

0:Read Only
1:Clear error counter and retry counter
2:Clear pick counter
3:Clear all counters (error,retry,pick)

[3-6.Sensor Transition Command]



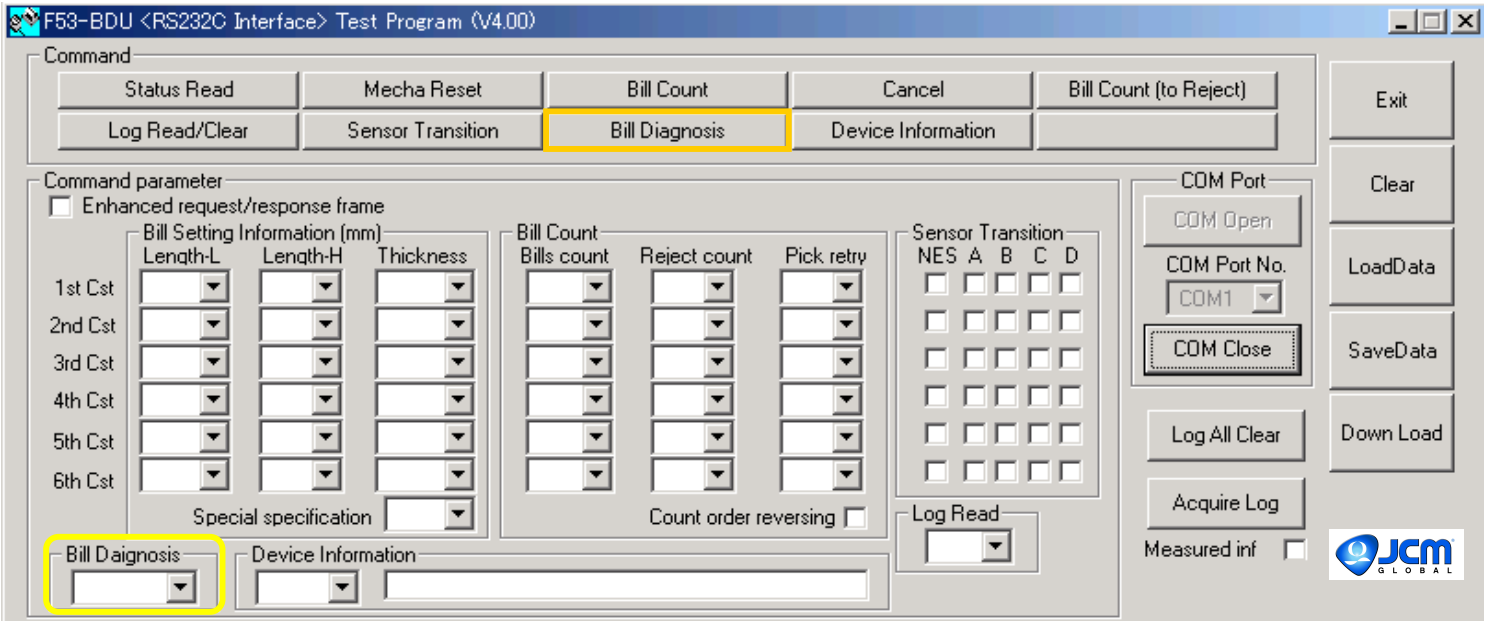
※ **Sensor Transition command** **This command monitors sensor status and sends a response when detecting a change in this status.**

Put ticks in the applicable check box, then press the sensor transition command button.

The box is not checked :Ignore

The box is checked :Effective

[3-7.Bill Diagnosis Command]

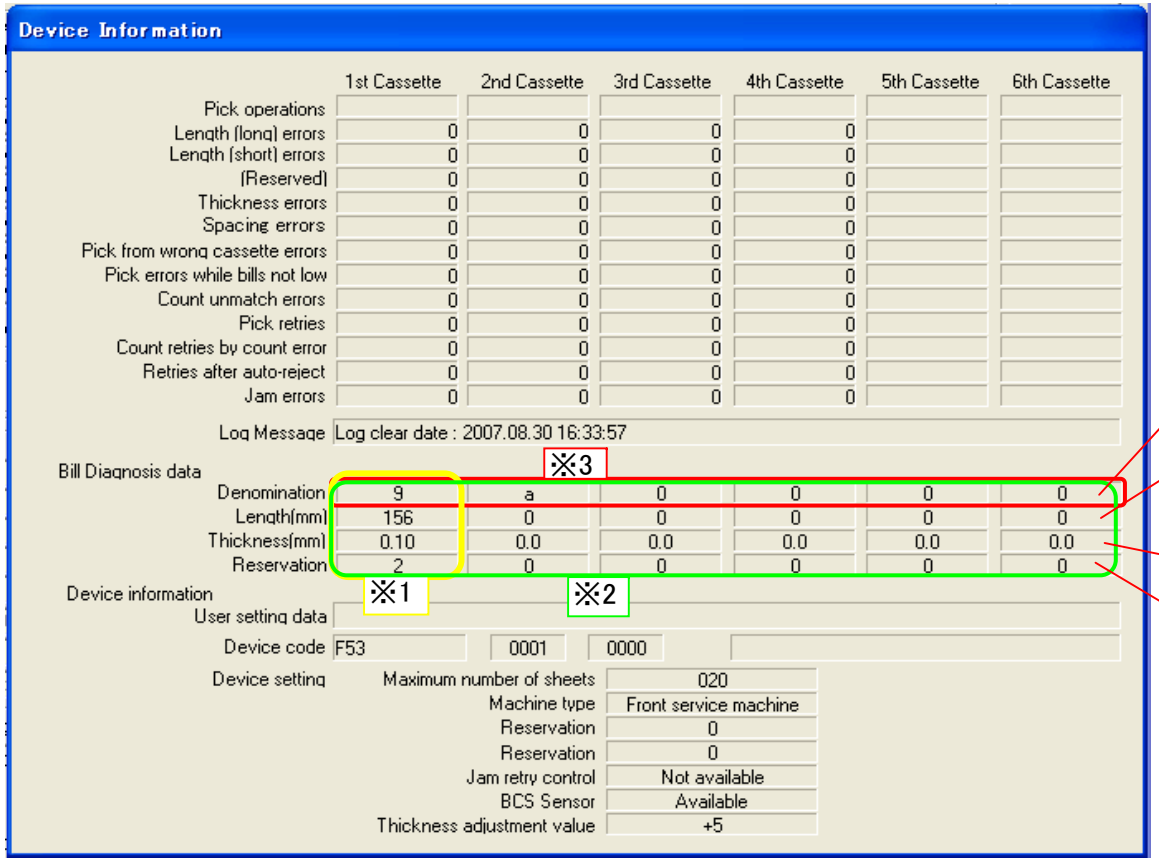


diag all,diag 1cst,
diag 2cst,diag 3cst,
diag 4cst,diag 5cst,
diag 6cst,read,
reset,denomi

Bill Diagnosis **This command calculates the length of the bill and the thickness of the bill of each cassette.**

Operation type:	diag all	Diagnosis of set cassette
	diag 1cst	Diagnosis of the 1st cassette
	diag 2cst	Diagnosis of the 2nd cassette
	diag 3cst	Diagnosis of the 3rd cassette
	diag 4cst	Diagnosis of the 4th cassette
	diag 5cst	Diagnosis of the 5th cassette
	diag 6cst	Diagnosis of the 6th cassette
	read	The diagnosis data is read
	reset	Initialization of diagnosis data
	denomi	Denomination registration

Note) After Bill Diagnosis, if you select "diag" in the pull-down menu of bill length, test program sets the bill setting information based on Mesured bill info.



It shows examples of command use.

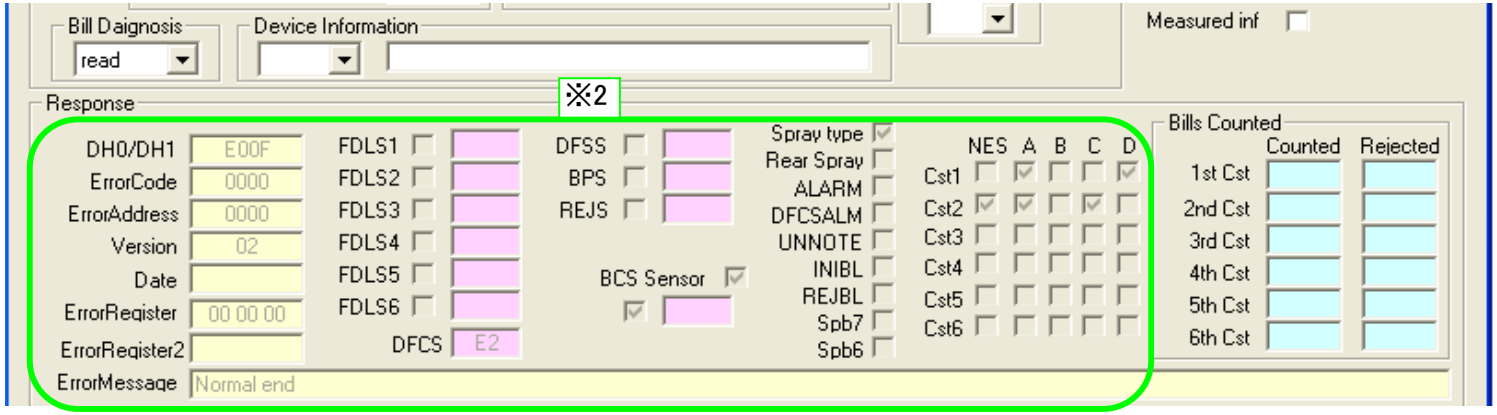
diag 1cst	Diagnosis of the 1st cassette	※1
read	The diagnosis data is read	※2
denomi	Denomination registration	※3

denomination : BSnA～BSnD

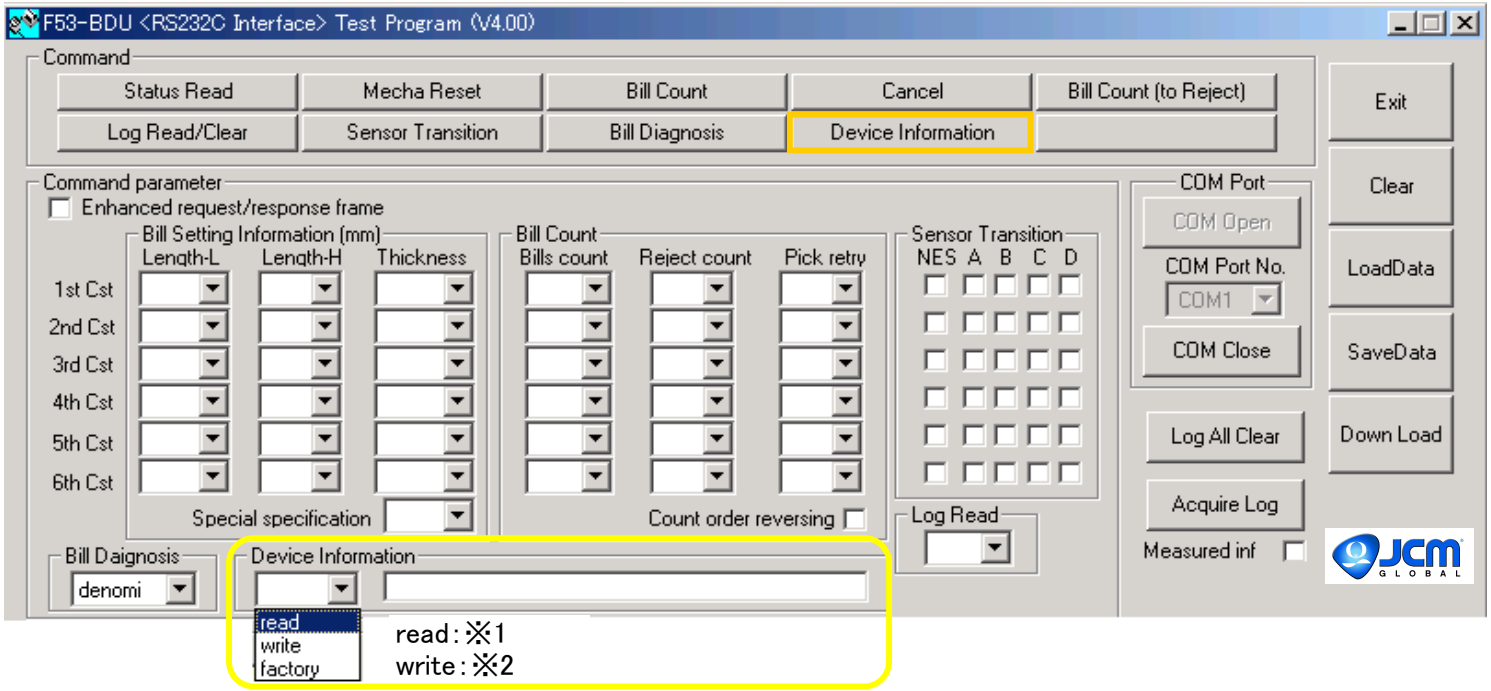
average length : Hex ex. 156mm ⇒ 0x9C

average thickness : Hex ex. 0.12mm ⇒ 0x0C

Reservation

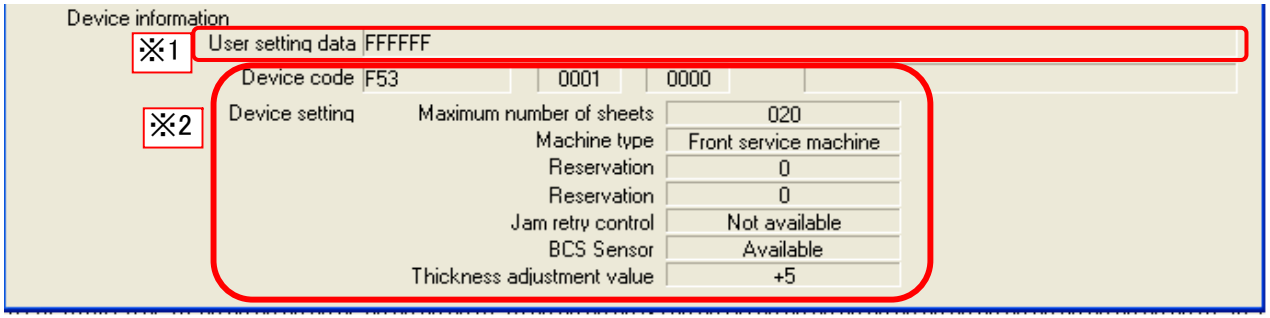


[3-8.Device Information Command]



Device information

This command is used to know device information.



※Latest program shows also ROM version in the lowest column.

[4.Procedure]

4-1. Procedure

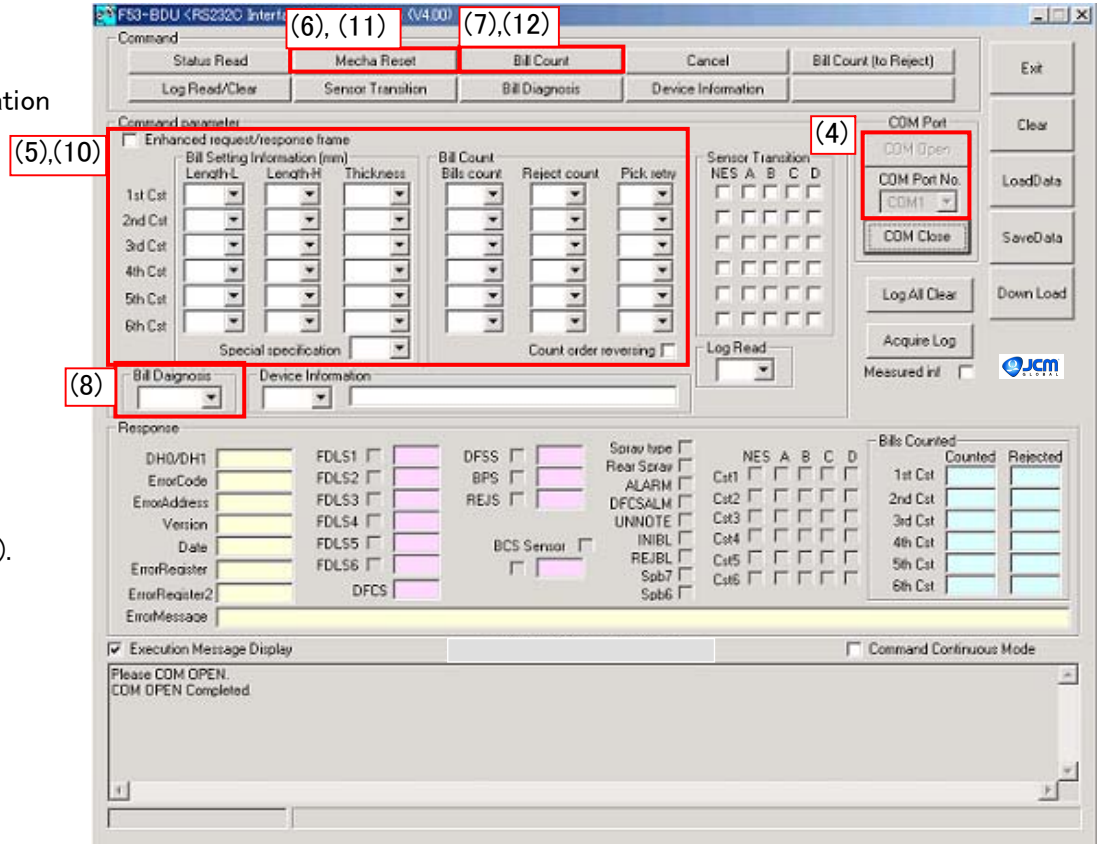
【Connecting BDU and PC with RS232C cable】
(1) Connect BDU and PC with RS232C cable.
(2) Connect Power supply and turn on the Power and adjust the thickness sensor.
(Please make sure that the thickness sensor adjustment is finished correctly.)
(3)Open Test Program "F53bduTP.exe" in the folder with "FKBDULDV.DLL".
(4) Choose Com port No. and issue "COM Open" command.
(Confirm that Message Display shows "COM OPEN Completed").

When you know the bill information(bill thickness, bill length and width), do as follows.

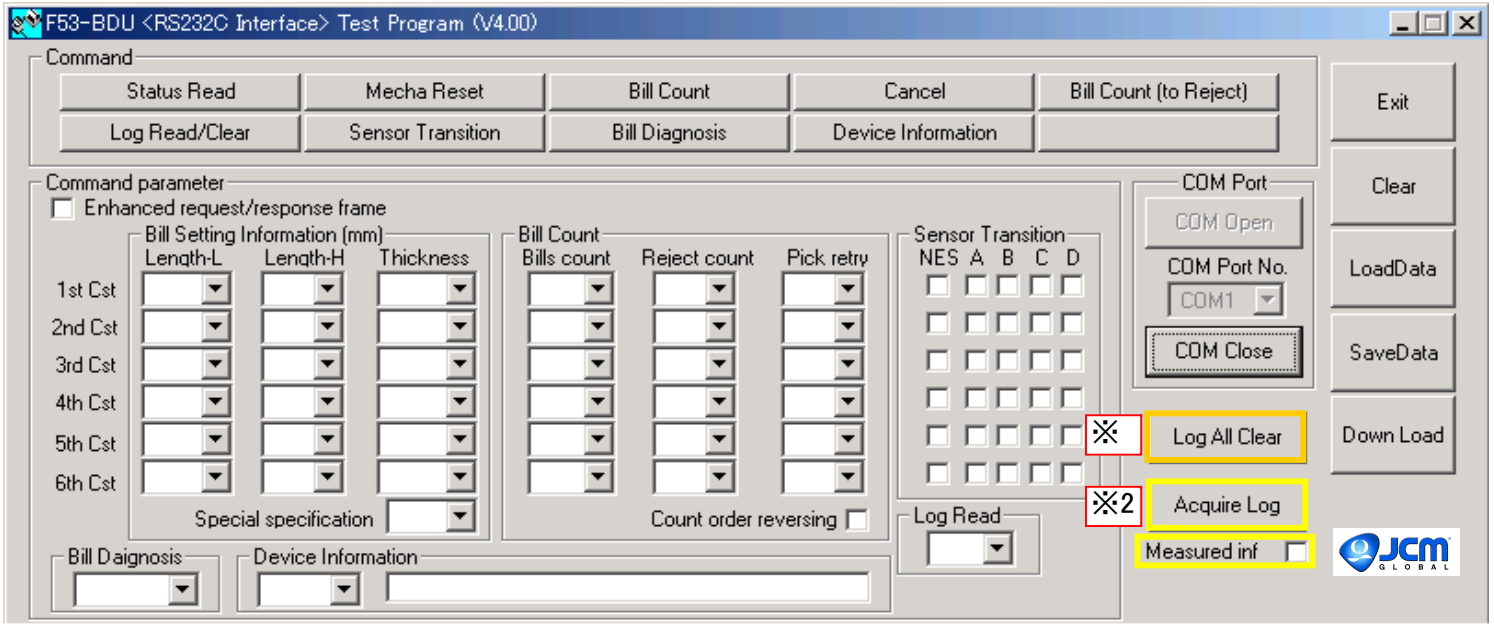
【Bill count】
(5) Fill the Bill Setting information, and Bill Count information in the column of the cassette you use.
(6) Issue Mecha Reset command.
(7) Issue Bill Count Command.
(Our Recommendation is 50～100 total.)

Otherwise,do as follows.

【Bill Count using Bill Diagnosis command】
(8)Select the operation type from the pull down menu, then issue the Bill Diagnosis command.
(9) See Thickness in the device information window, and write it down.
(10) Set both Length-L and Length-H as "diag" from the pull down menu, and thickness as Mesuered thickness(9) data +0.02(recommend).
(11) Issue Mecha Reset command
(12) Issue Bill Count Command.



[5.Log Command]

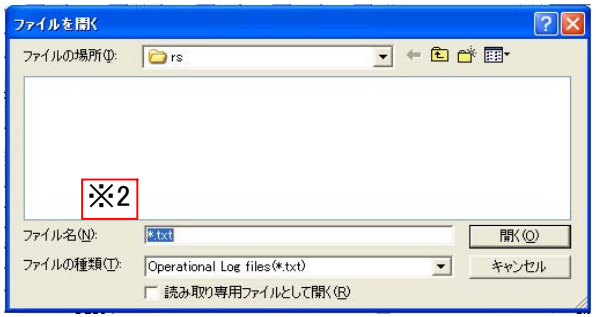


LogAllClear

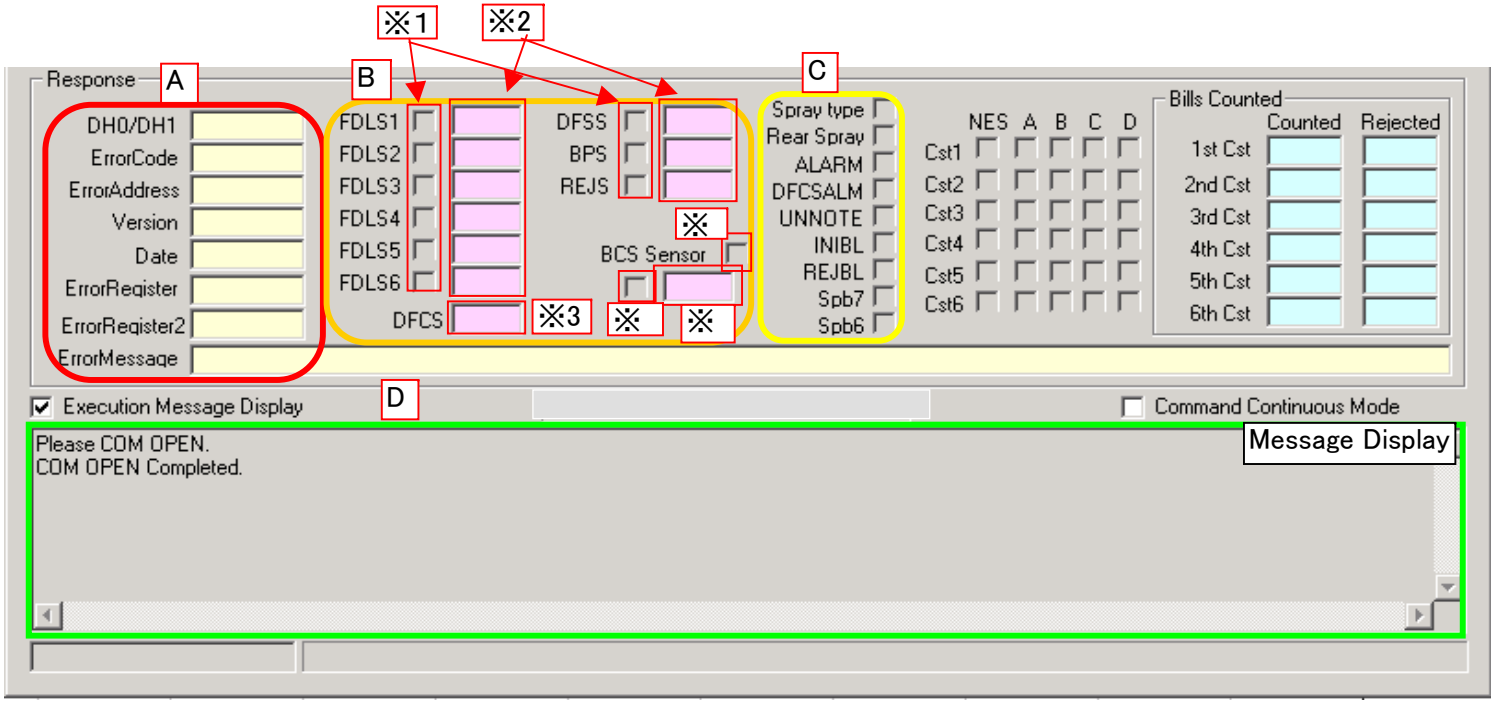
※ Log All Clear command is the same command as LogRead command(OPR:3).
This command clears the statistics deta ie. error, retry,and pick counters.

Acquire Log

※2 **Aquire Log command acquires information to analysis the cause of the error which BDU detected.**
Aquired information is Measured information,Operational log,Command/Response log, and Thickness information.
As you put tick in the applicable check box[Measured inf],you will acquire only Measured information data(.txt).
To analyze the data,use the text file and macro file [Bill analysis .xls]..



[6.Response Frame]



A DH0/DH1 : The type and meaning of the response frame.
ErrorCode : To know in detail,refer to the ErrorMessage or the ErrorCodeList(REF.separete

B By the check box, we can know whether the light of a photosensor is occluded,or transmissive.

※1 Checked : transmissive
Not checked : occluded

※2 ***This sensor level information indicates light emission intensity sorted as follows:**
2 ～ 8 : Normal
9 ～ 12 : Maintenance necessary (Cleaning)
13 ～ 14 : Error (Requires replacement)

※3 This indicates thickness sensor value (Hex mode).

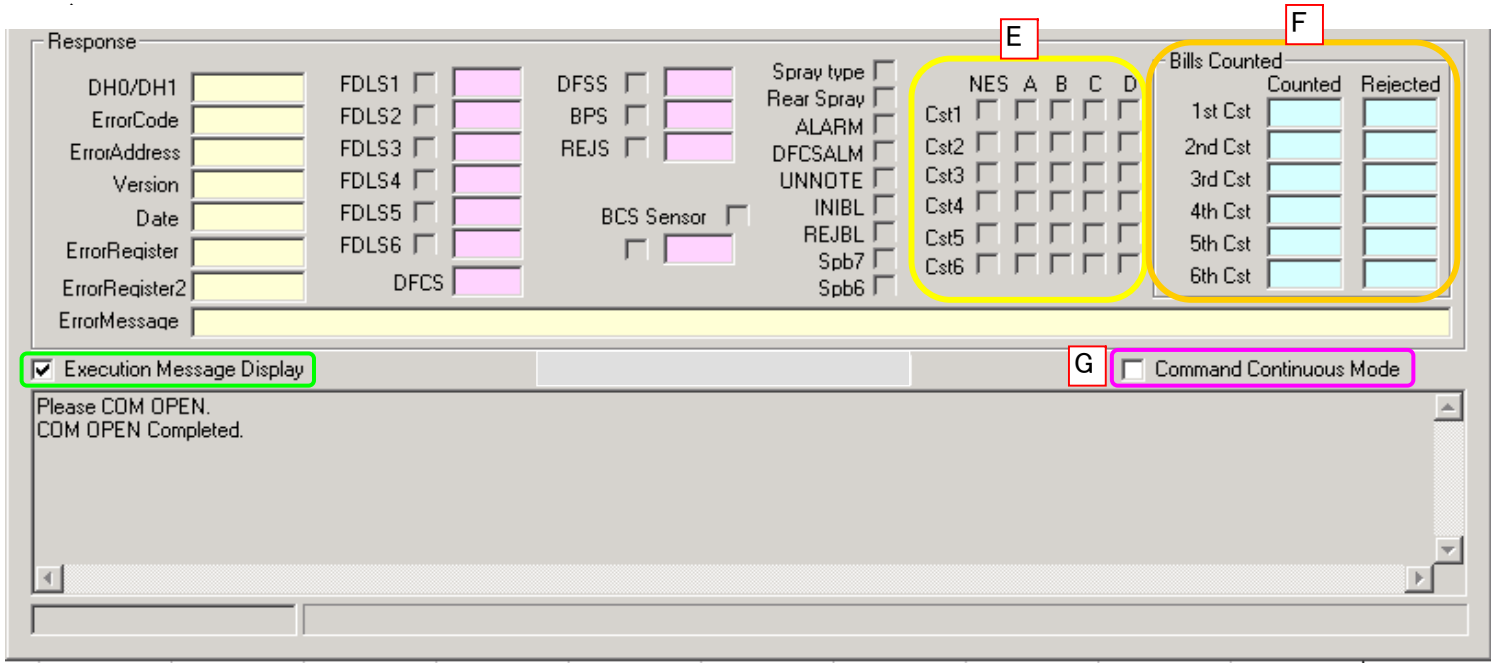
※4 In case of using BCS sensor, this box is checked.
Otherwise,it doesn't check..

C

spray type : To know whether this machine is spray type or not.
Rear Spray : Use rear spray (Dual spray type).
ALARM : Sensor level down.
DFCSALM : DFCS changed greatly.
UNNOTE : Existence or nonexistence of counting response uninformed to the PC.
INIBL : Set when any bill was ejected by initialization command.
REJBL : Set when any bill was rejected by initialization or count command.
Spb7 : The parameter contents (Special specification) set by Mecha Reset Command
Spb6 : The parameter contents (Special specification) set by Mecha Reset Command

D

Message Display shows the Serial Communication data(Com open data,Request Frame raw data,and Response Frame raw



E

The area marked in Yellow,indicates detection of the sensors {NES(Near End Sensor),BSnA,BSnB,BSnC,and BSnD}.

F

The area marked in Orange,indicates how many bills are counted and rejected.

G

As you put tick in the applicable check box [Command Continuous Mode],selected commands[Mecha Reset, Bill Count,Bill Count(to Reject)] are repeated.