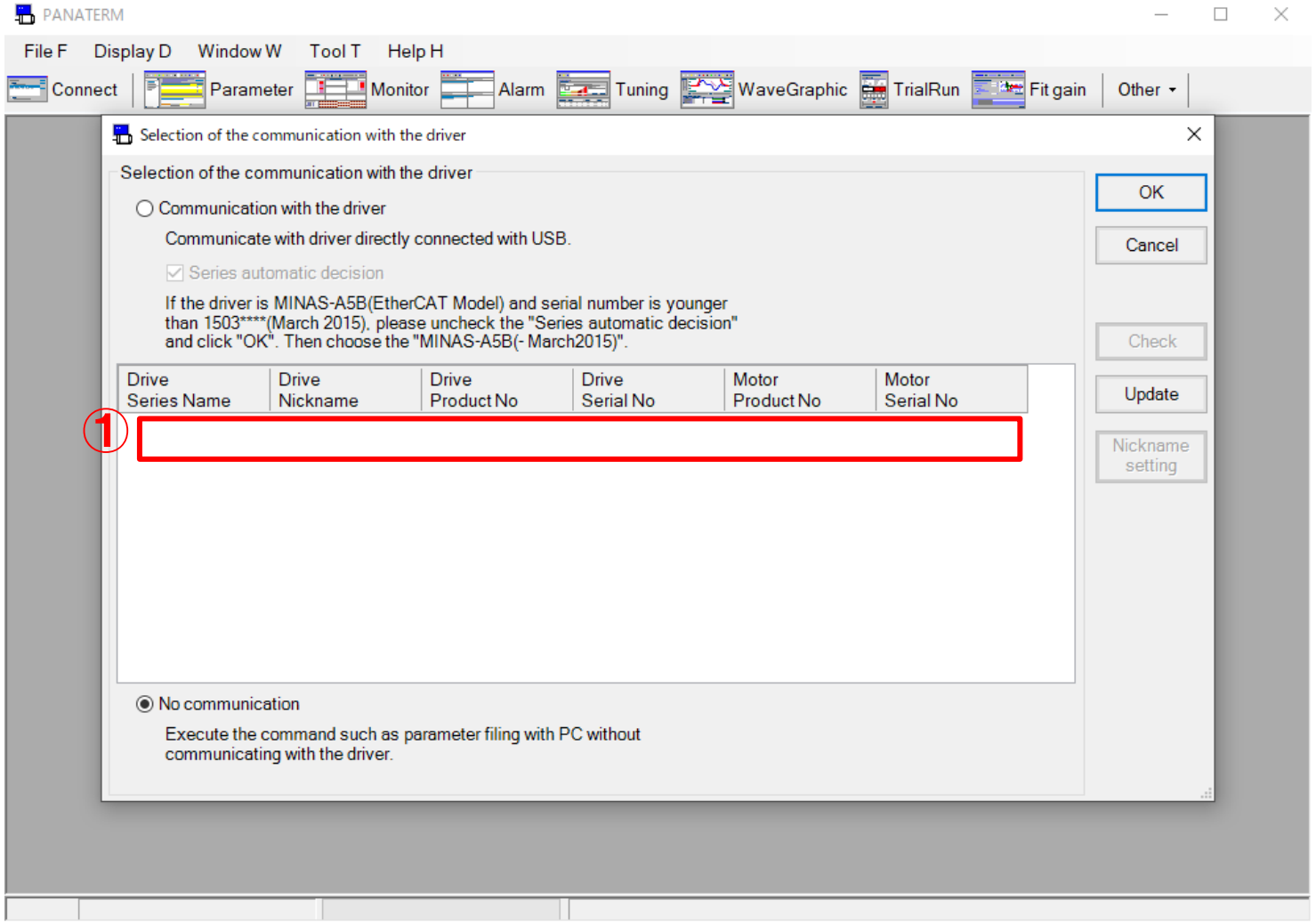
MiSUMi
Linear Motor Actuator
Panasonic SetUp Manual
Rev.1

2024-07-30
IM Division
Motion Unit Team

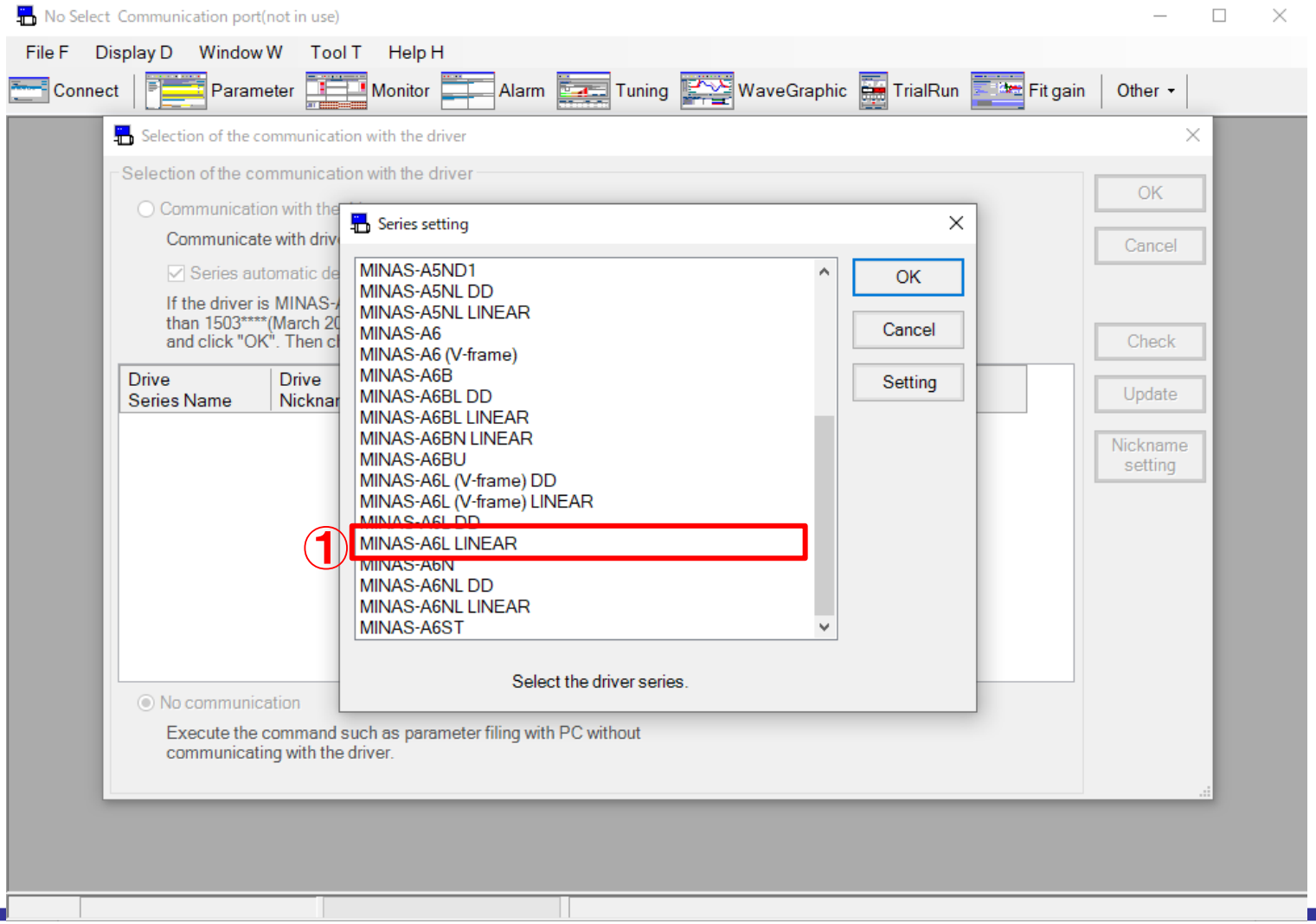
Drive access

- Turn on the drive, connect with USB, and run PANATERM.
- ① When the drive are shown, click “OK”.



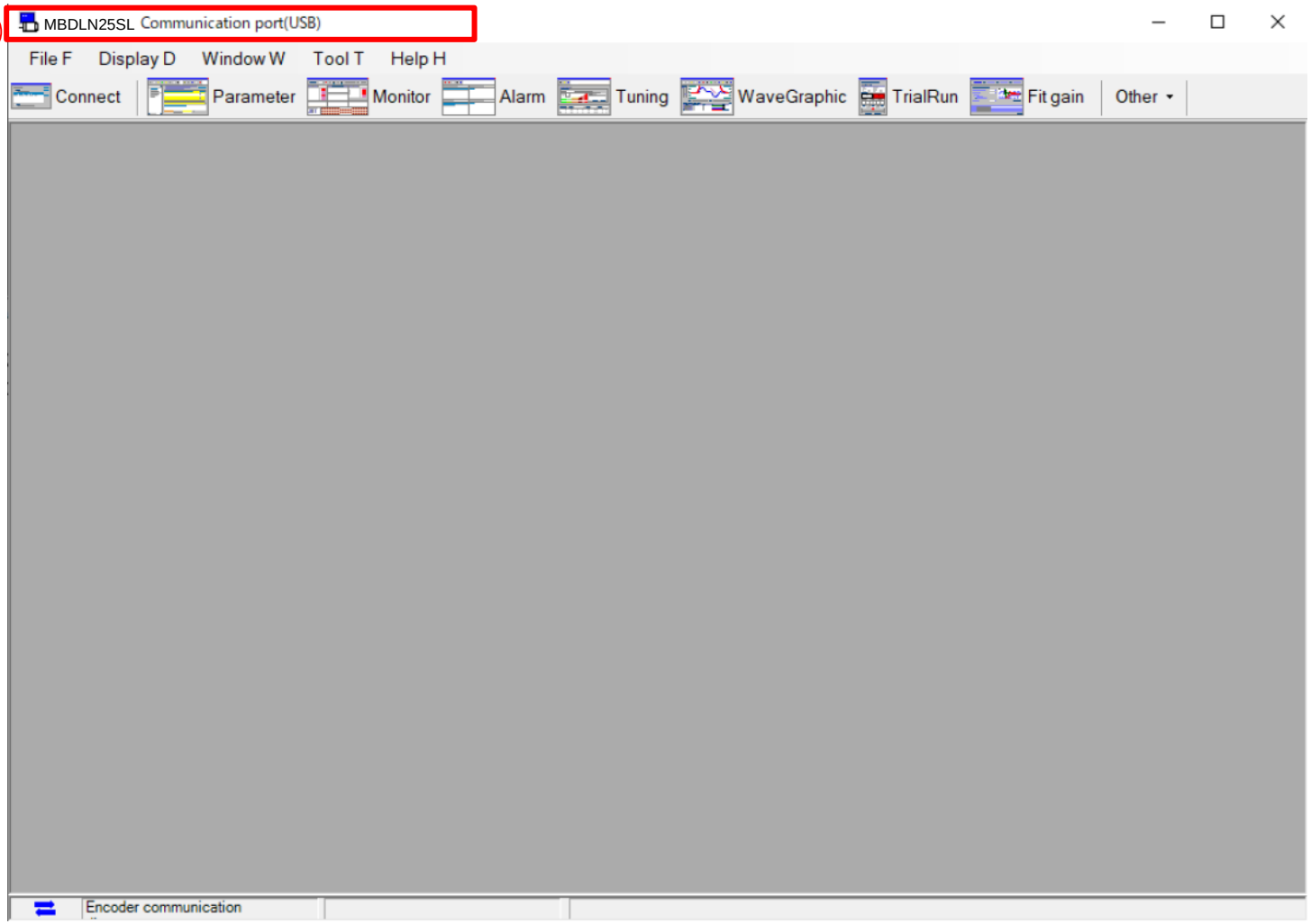
Drive access

- When a pop-up window appears as shown in the screen, select MINAS-A6L LINEAR as shown in ① and click “OK”.



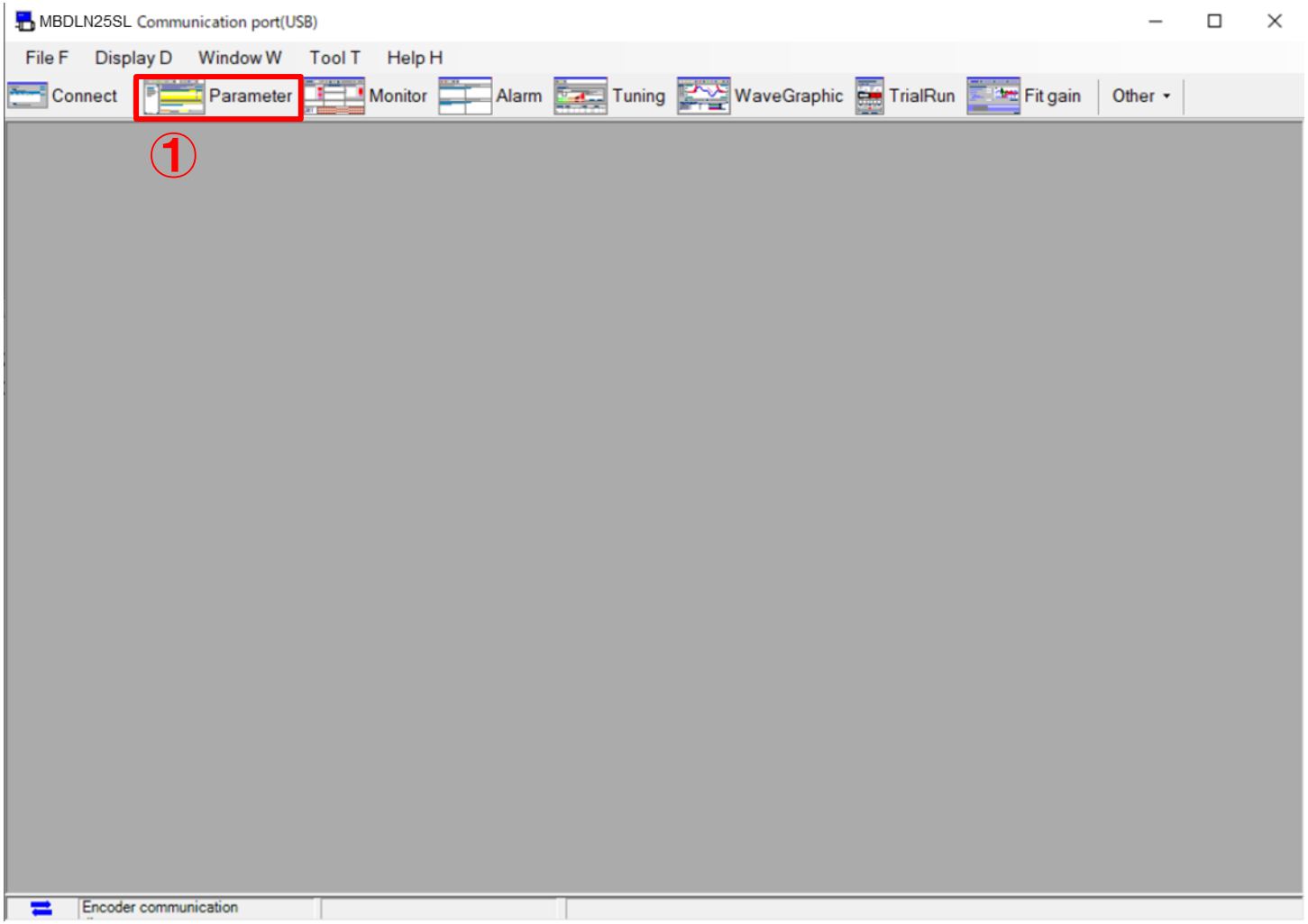
Drive access

- If communication is normal, the drive type MBDLN25SL is displayed in ①.
- If communication is not possible, reboot the drive and reconnect as done above.



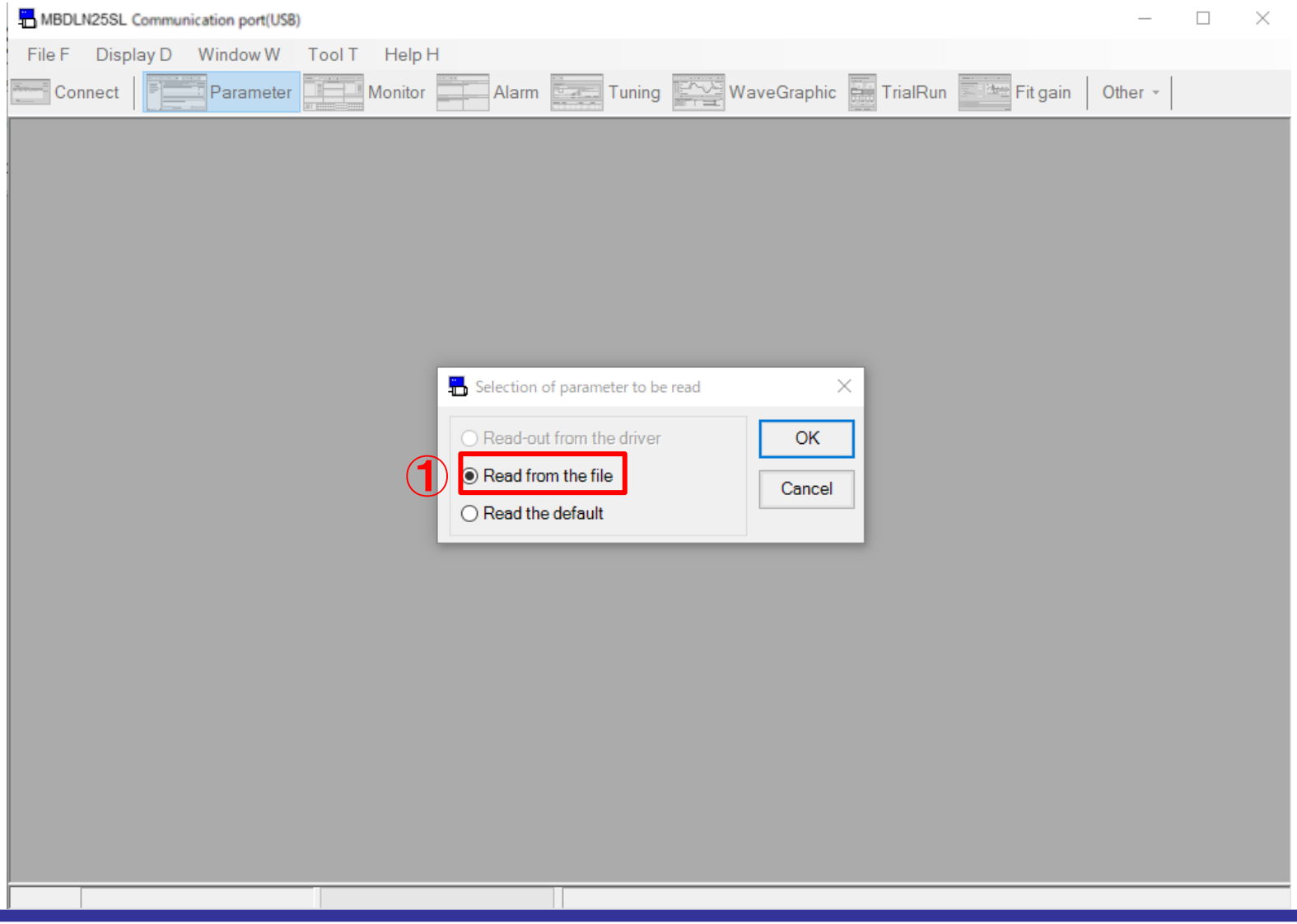
Parameter Restore

- ① Click Parameters.



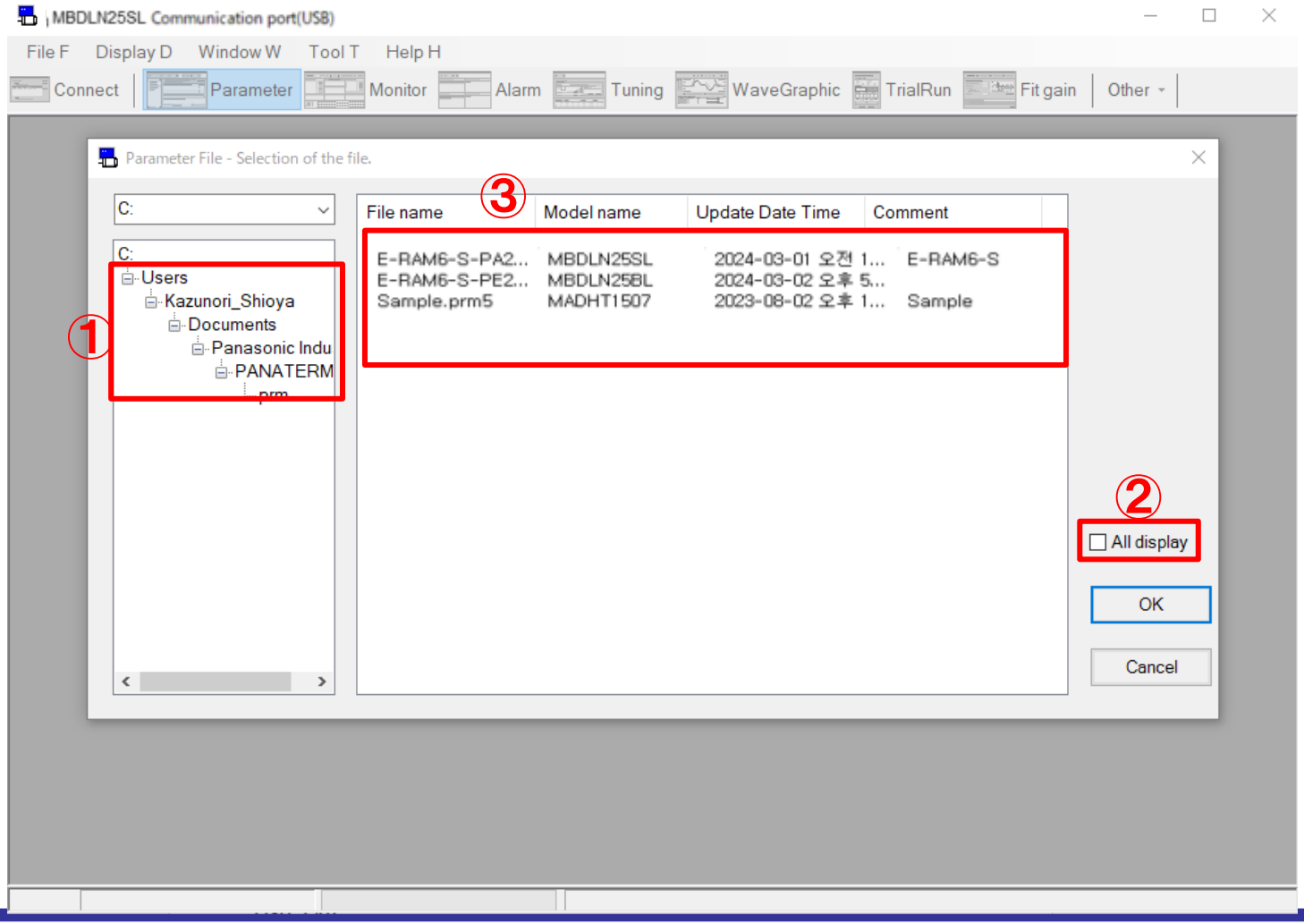
Parameter Restore

- Select “Read from the file” and click “OK”.



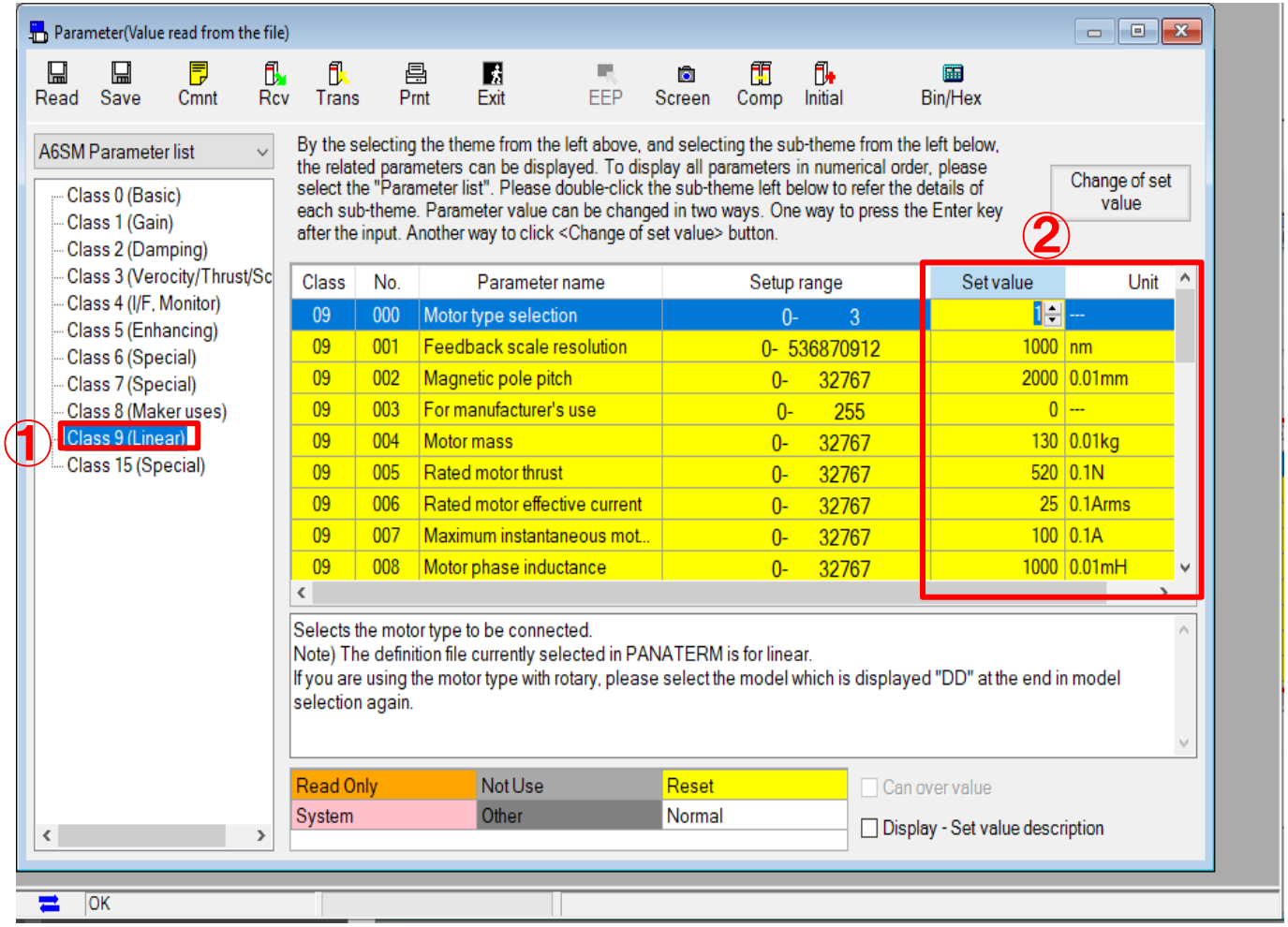
Parameter Restore

- ① Check the location where the parameters are saved and click ② “All display”.
  ③ Select the parameter file and click “OK”.



Parameter Restore

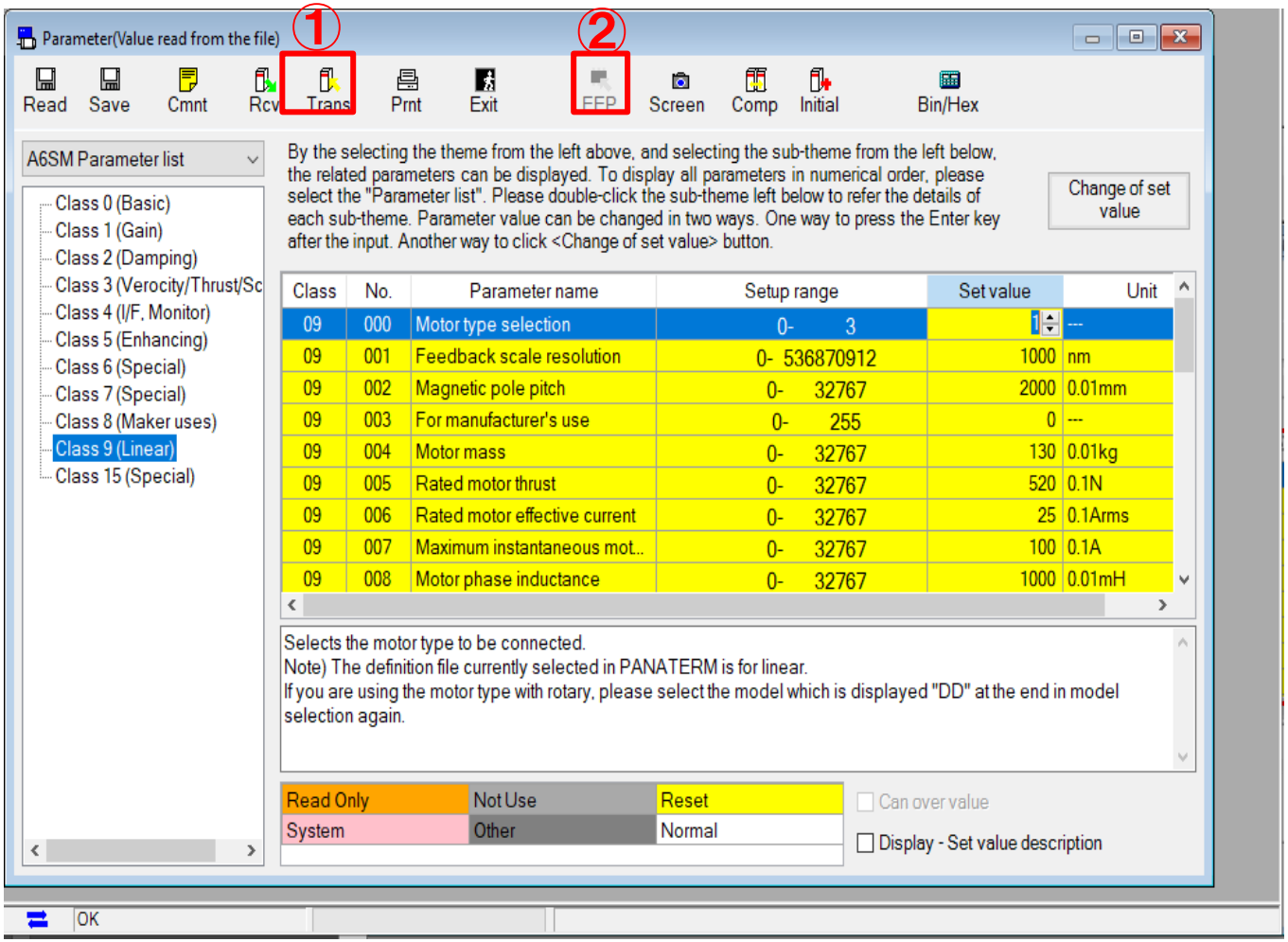
- After clicking “OK” in the pop-up window that appears, select ① Category 9 and ② check whether the parameter values are entered correctly.



			E-RAM6-S	E-RAM8-M
09	000	–	1	1
09	001	nm	1000	1000
09	002	mm	20	20
09	004	kg	0. 35	1. 7
09	005	N	38	98
09	006	Arms	2. 5	2. 5
09	007	A	10	10
09	008	mH	9. 4	21. 4
09	009	Ω	3. 2	6. 6
09	010	mm/s	1500	2000
09	020	–	2	2
09	022	ms	200	200
09	023	%	80	80

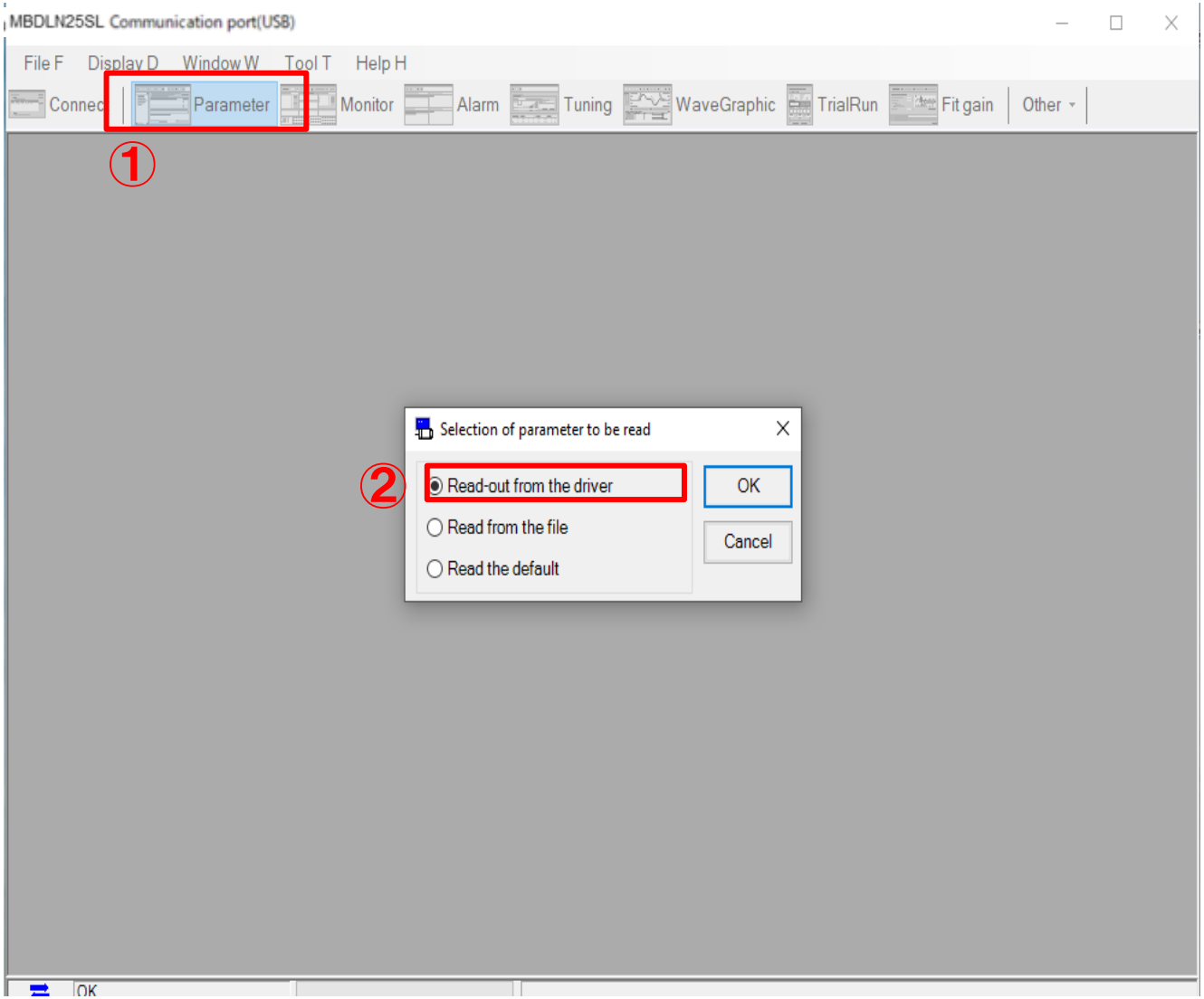
Parameter Restore

- ① Click “Trans” and when transmission is complete, ② Click OK in the pop-up window that appears after clicking “EEP”.
- When the pop-up window closes, the drive will reboot.



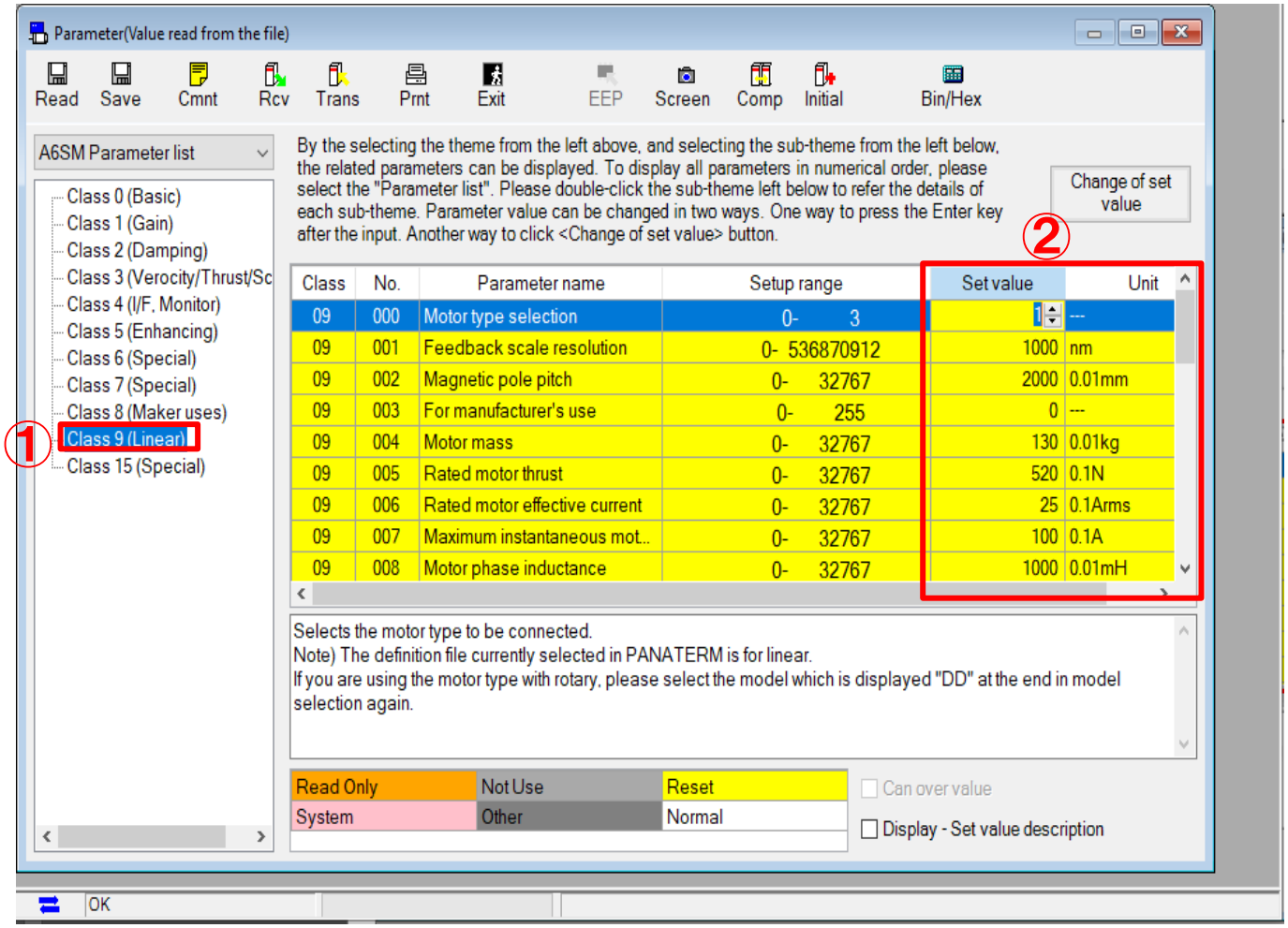
Parameter Restore

- After reconnecting with the drive, click ① Parameters and then ② Click “Read out from the driver”



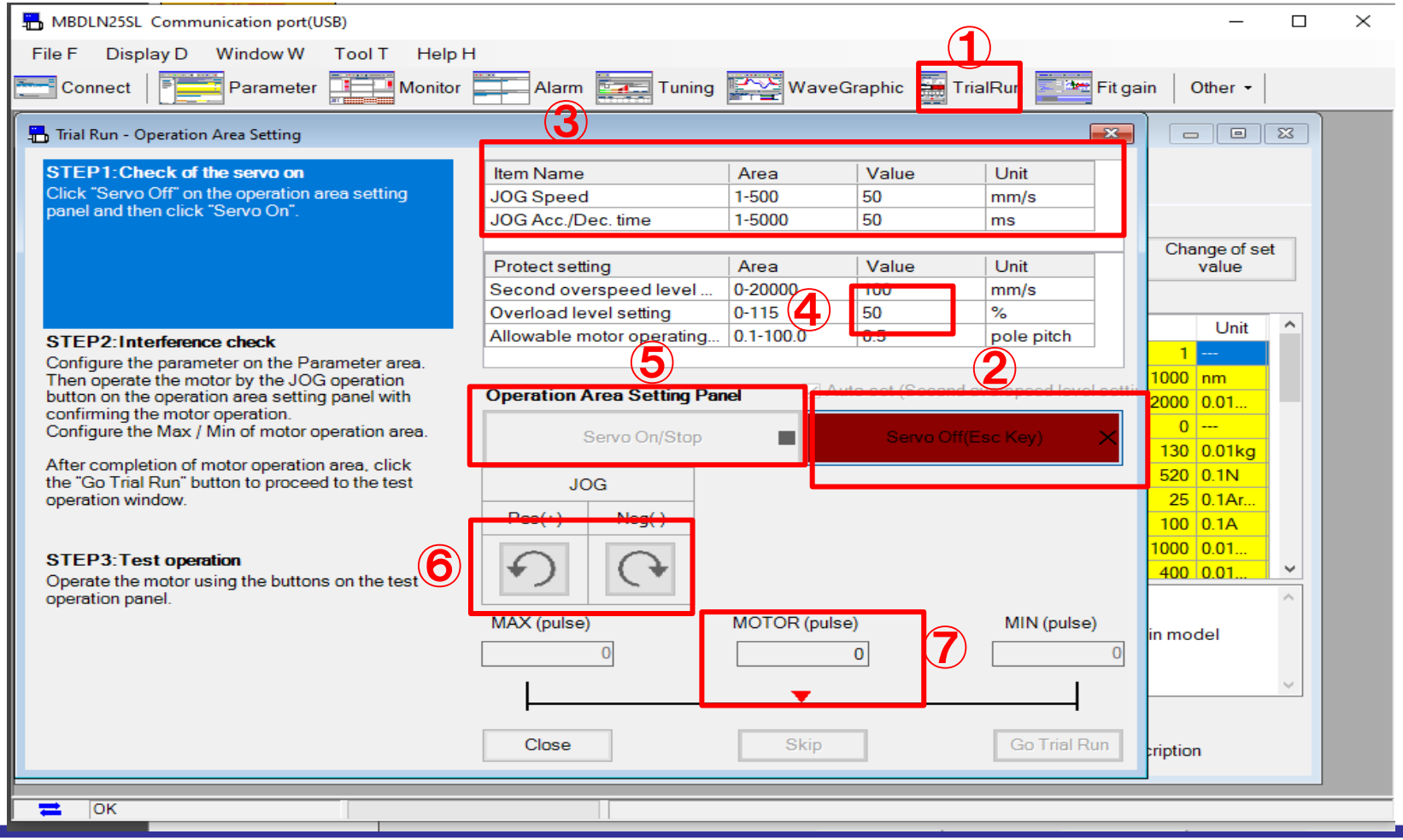
trial run

- ① After selecting category 9, ② check whether the parameter values are entered correctly.



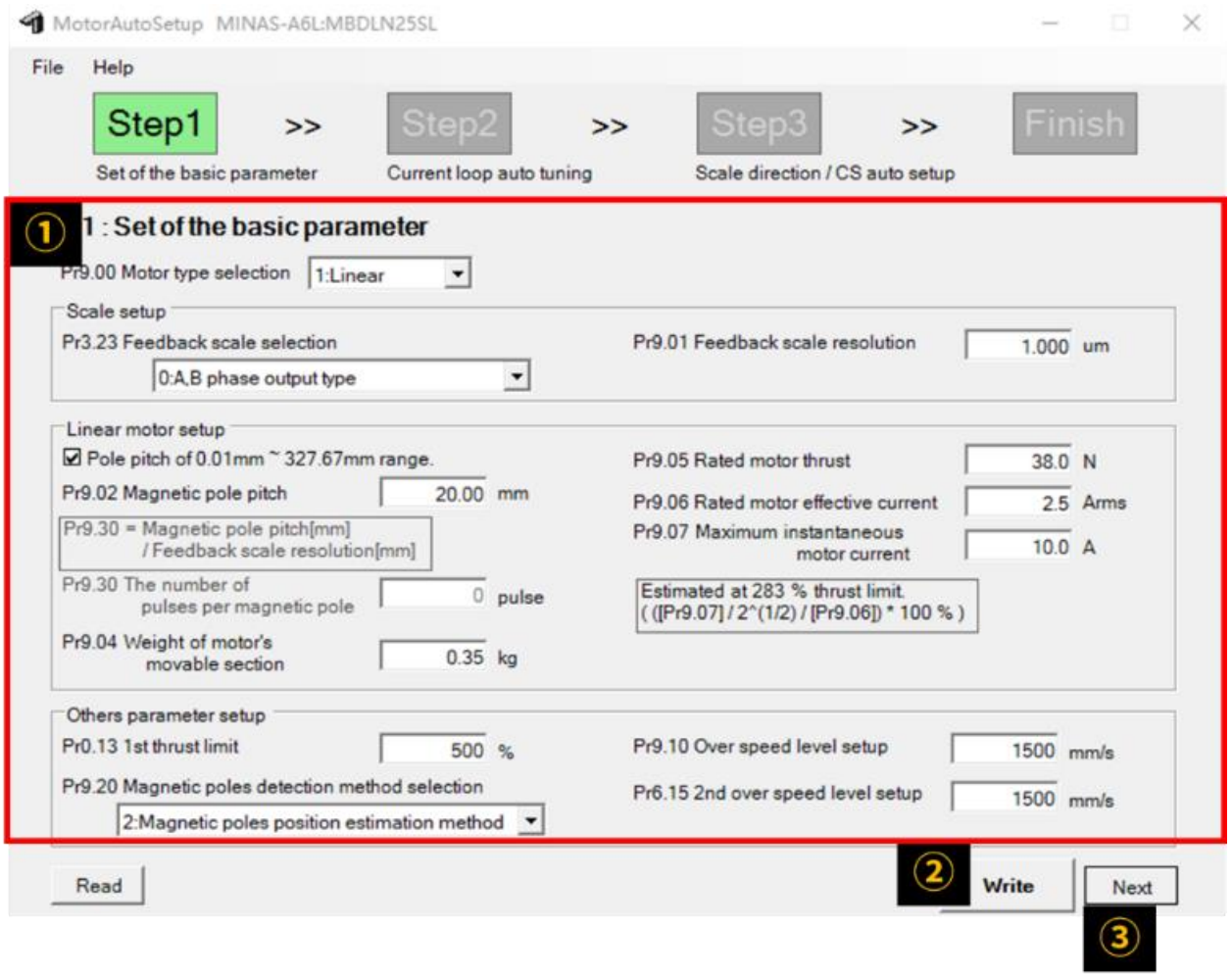
trial run

- ① After selecting “Trial Run”, ② turn off the servo to kill the motor, ③ input the acceleration/deceleration and speed values required for jog operation.
- ④ After inputting the overload level 115, ⑤ turn on the motor servo and prepare for jog operation.
- Click ⑥ and check whether the value ⑦ changes according to motor drive and jog drive.



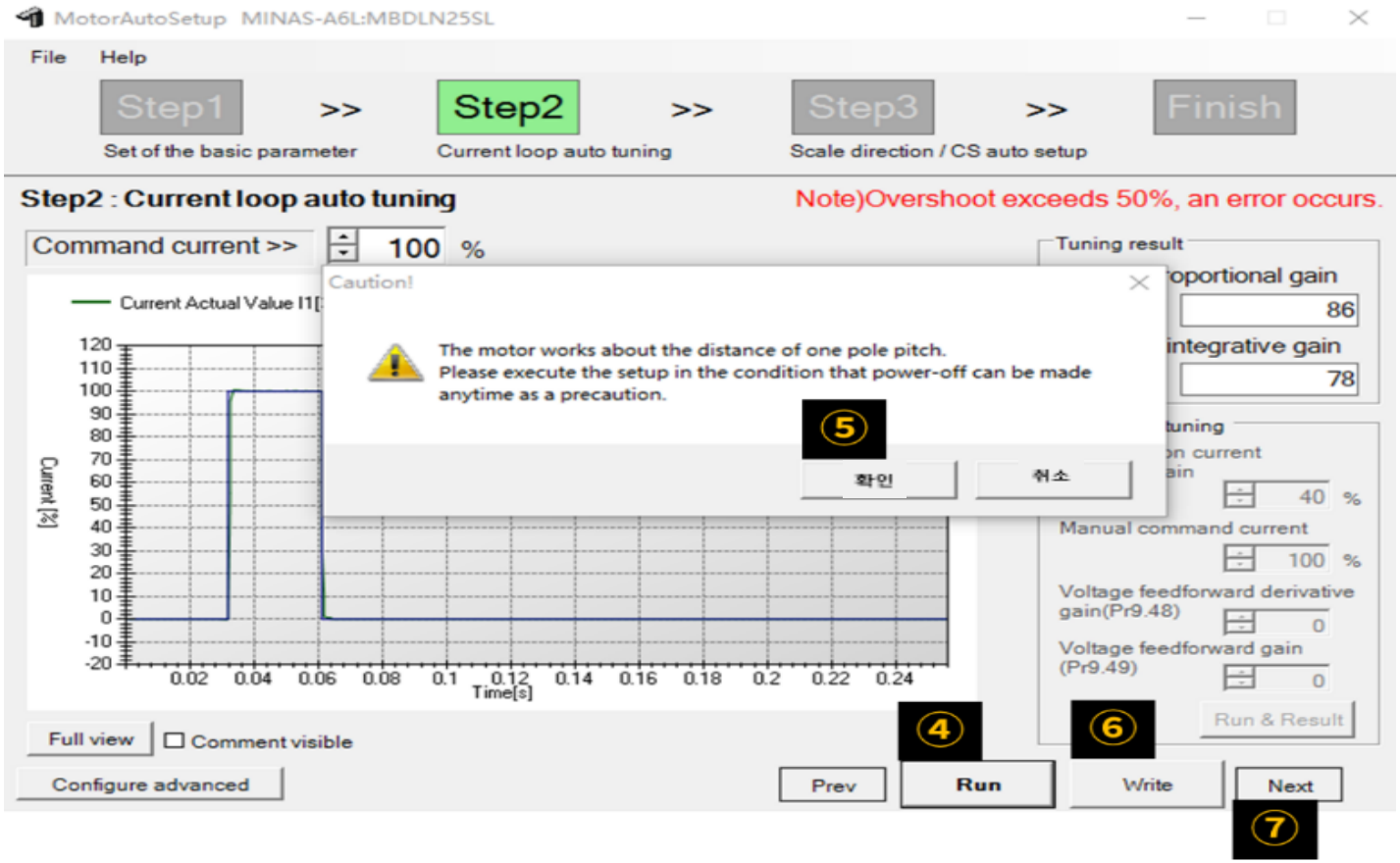
Auto Tuning (MotorAutoSteup)

- ① Check if Motor parameters are correct (especially Pr9.01 and Pr9.02).
- ② Click "Write", and ③ Click "Next".



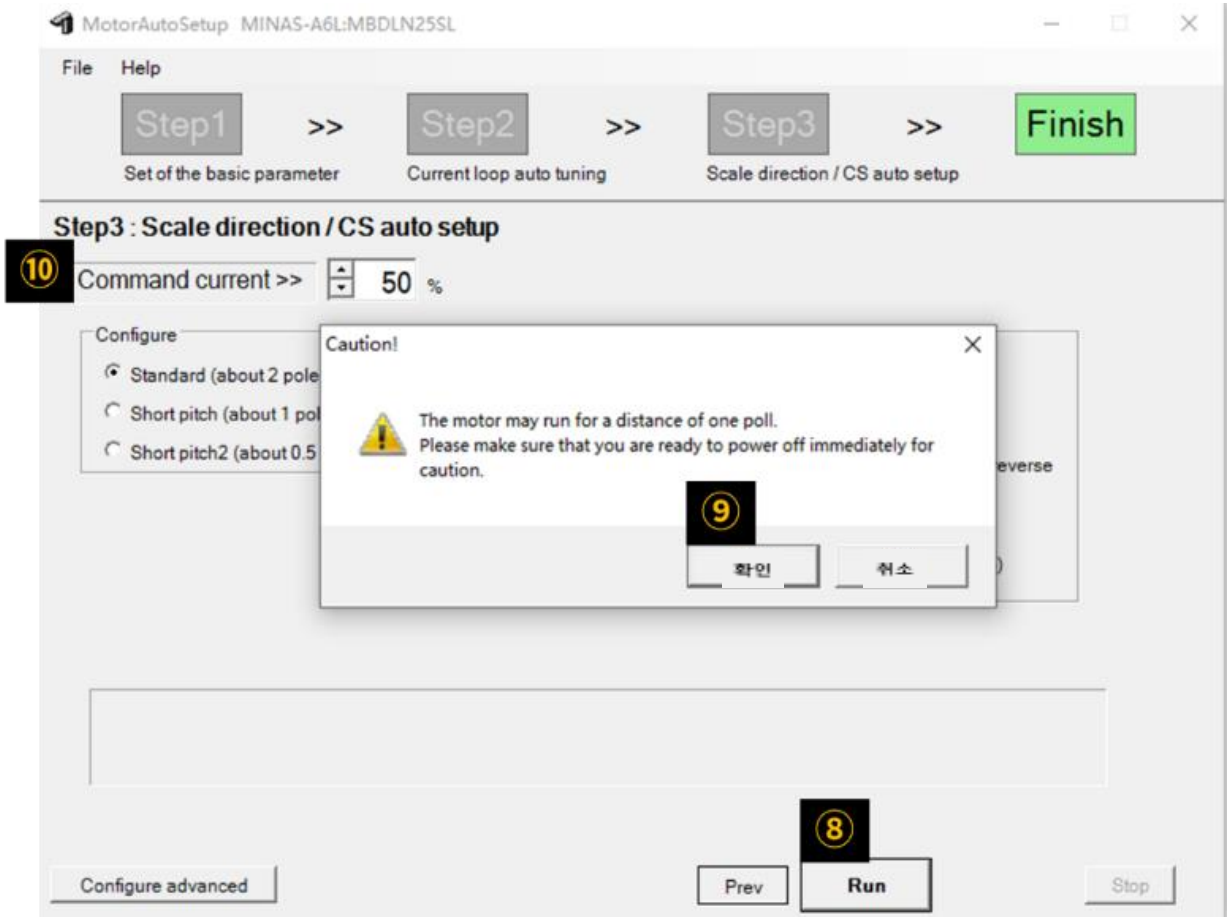
Auto tuning

- ④Click “Run”, ⑤Click “Confirm”, the actuator operates slightly for a moment and then stops.
- ⑥Click “Write”, ⑦Click “Next”.



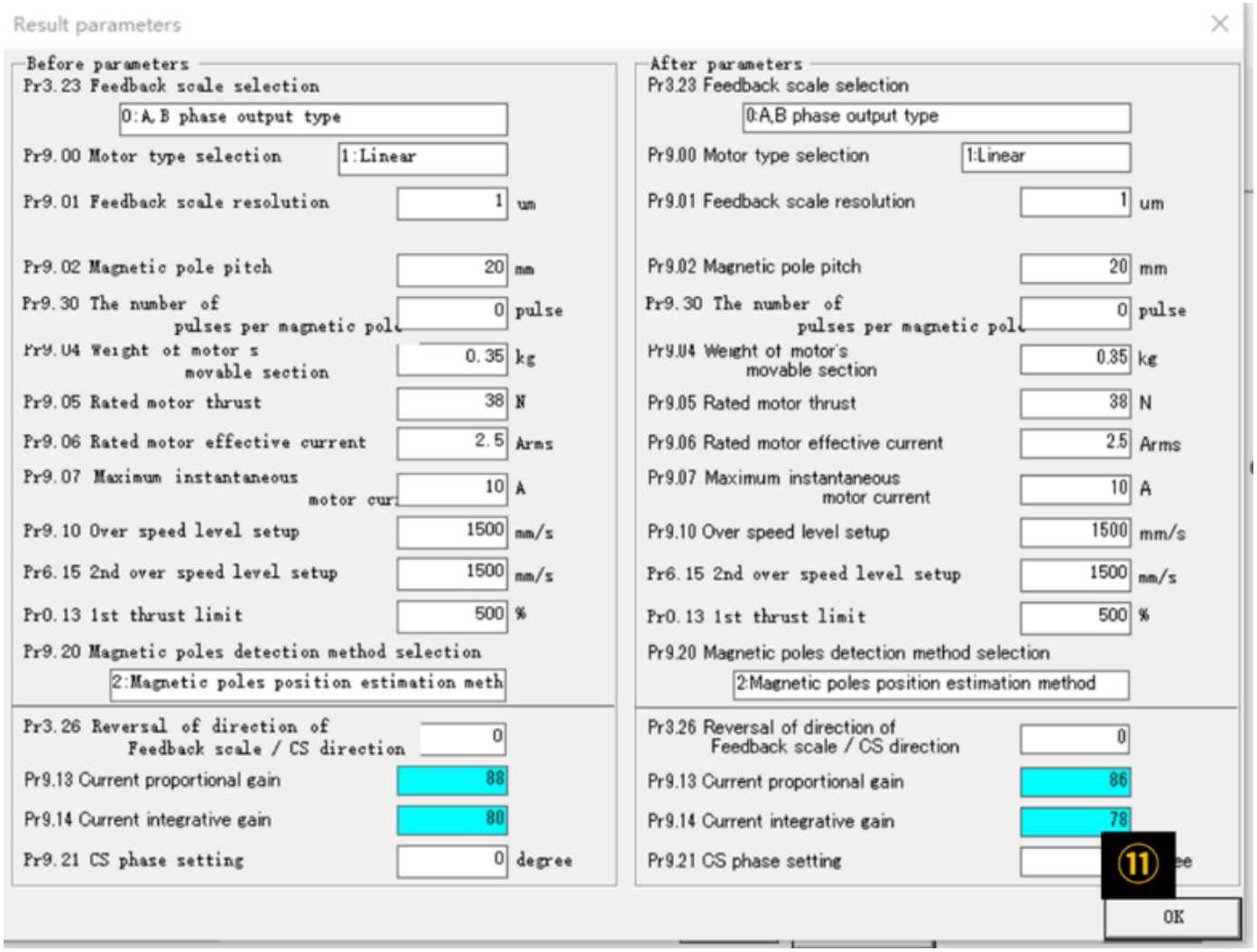
Auto tuning

- ⑧Click “Run”, ⑨Click “Confirm”, the actuator operates slightly for a moment and then stops.
- ! When an alarms, ⑩”Command current” can be increased appropriately.



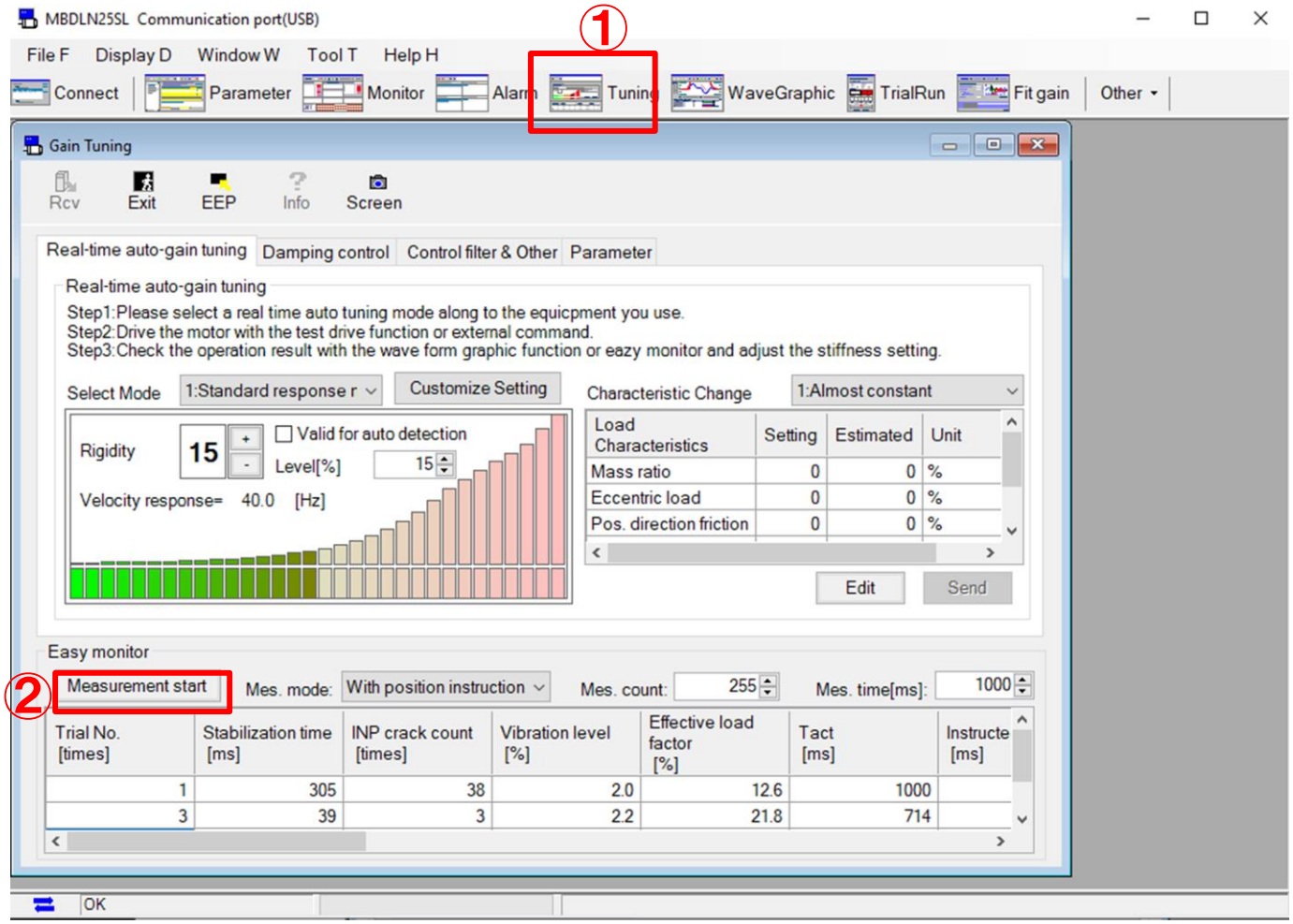
Auto tuning

- ⑪Click “OK” to close this software and turn off the driver and turn it on again.



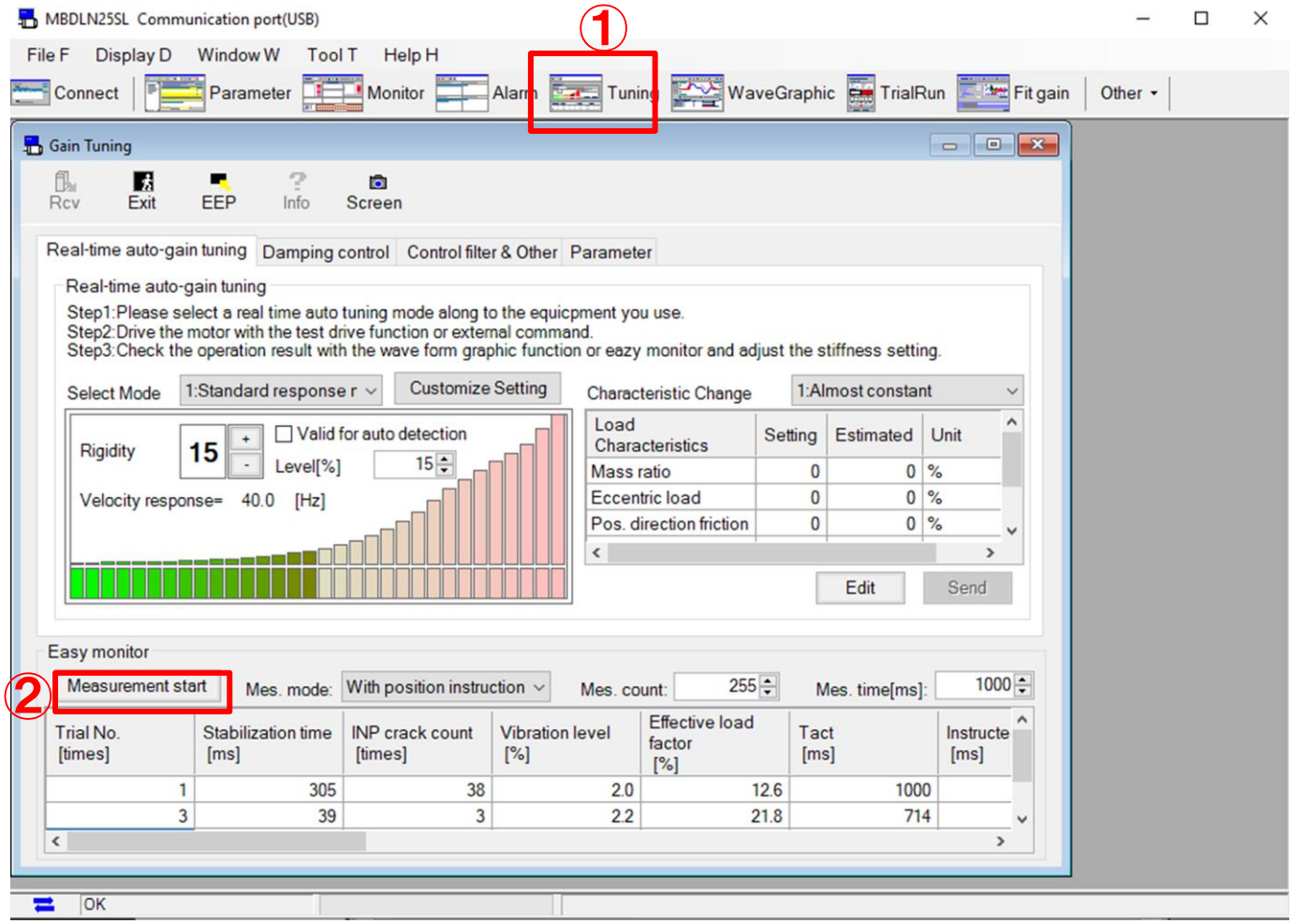
Auto tuning (Panaterm)

- ① Click “Tuning”.
- ② Click “Start Measurement” to check the current status.



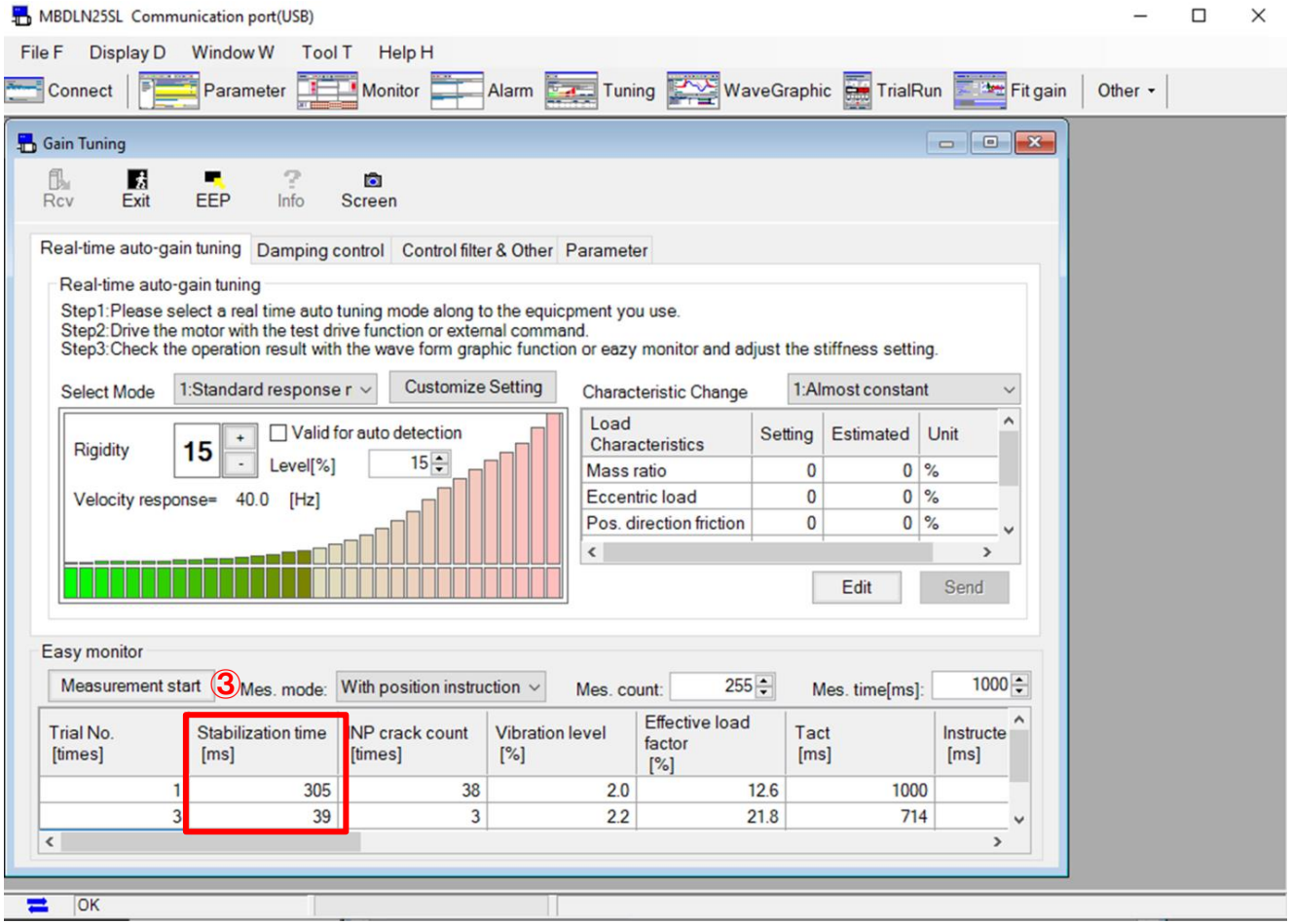
Auto tuning (Panaterm)

- ① Click “Tuning”.
- ② Click Start Measurement to check the current status.



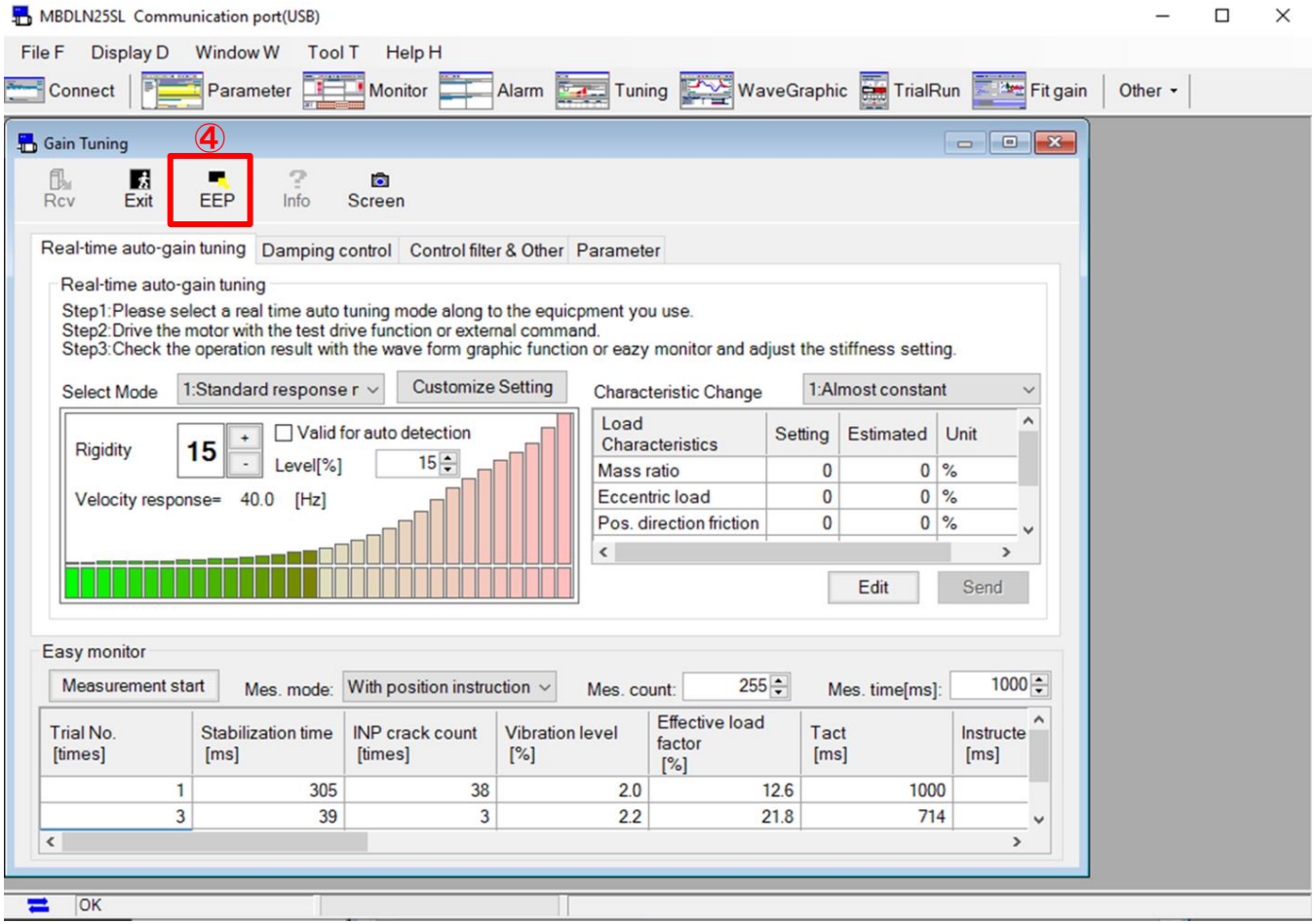
Auto tuning (Panaterm)

- After starting measurement, drive the actuator during test run and measure ③ settling time. Check it by repeating 2-3 times.



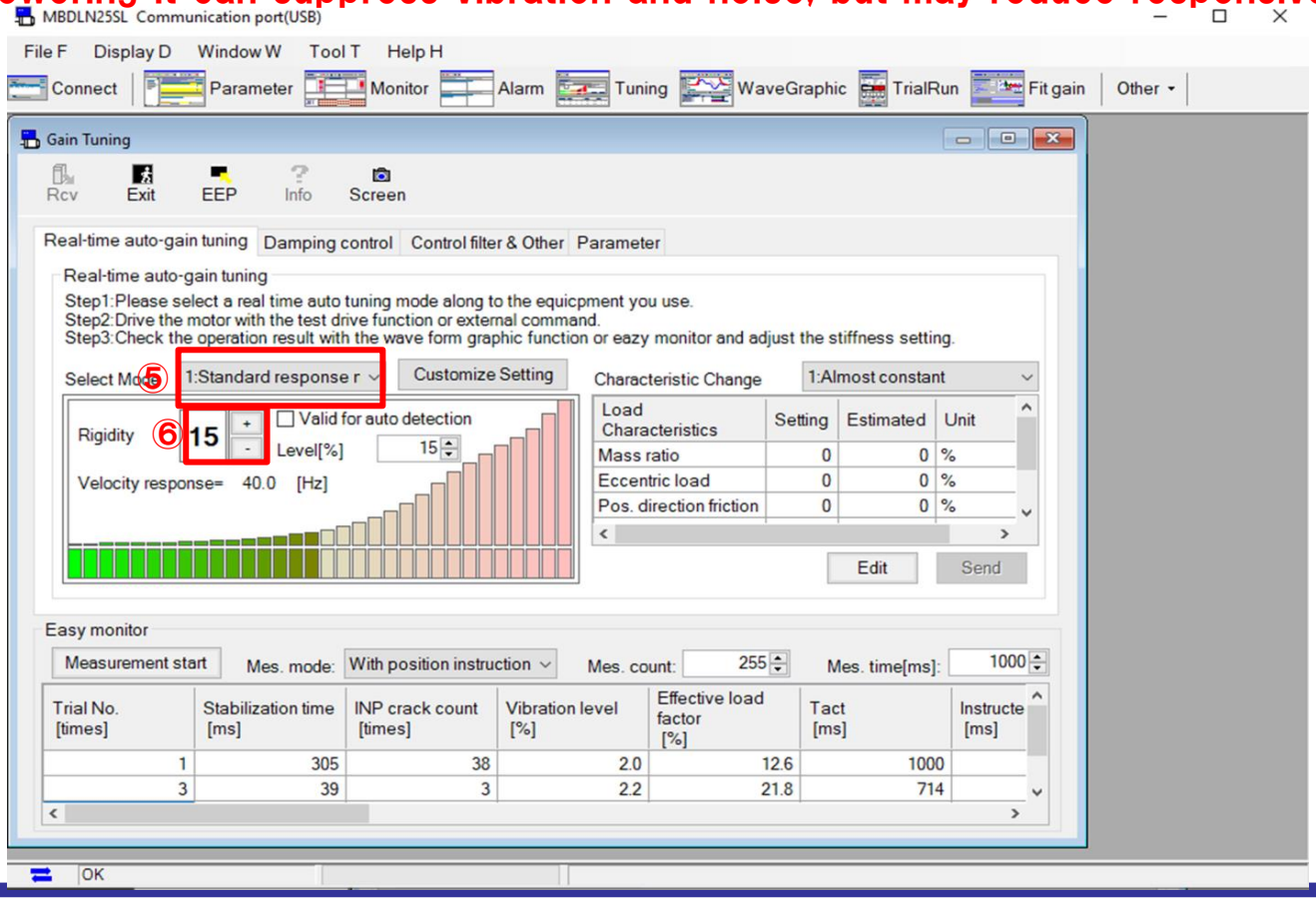
Auto tuning (Panaterm)

- ④If the correction time meets the specifications, click “EEP” to save the data.



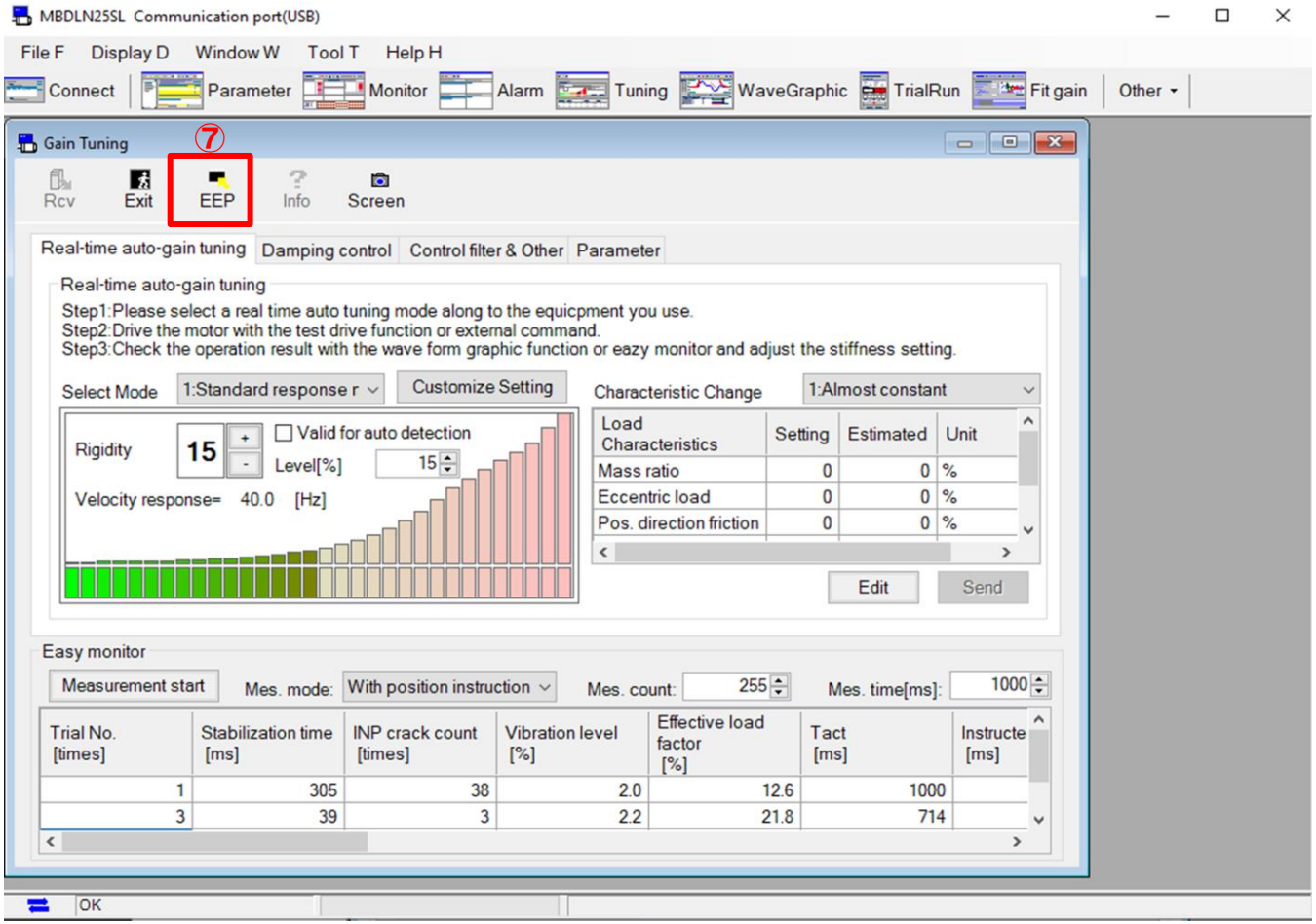
Auto tuning (Panaterm)

- If the settling time is out of the specifications, select “1” in ⑤ “Mode selection”: standard response mode.
- ⑥ Proceed with rigidity adjustment in rigidity settings
- ! Increasing it may provide more responsiveness, but may cause noise or vibration in the actuator.
- ! Lowering it can suppress vibration and noise, but may reduce responsiveness.



Auto tuning (Panaterm)

- If you find a correction time that meets the specifications through rigidity adjustment, click ⑦"EEP" to save the data.



Revision	Date	Reviser	Approver	Remark
1.0	2024.05.02	J.G.MIN	E.W.SHIN	First version