

CAN-UI

1. Screen capture

The screenshot shows the CAN-UI interface with several components highlighted by red boxes and letters:

- Block A:** Port selection (COM5) and Open/Close buttons.
- Block B:** Protocol selection (CAN 2.0A, CAN 2.0B, DroneCAN) and Speed (1000 kbps).
- Block C:** CAN ID for FW Update via bootloader (7F0).
- Block D:** Servo List table.
- Block E:** Read Max Wait (msec) and Scan Wait (msec) settings.
- Block F:** UID List table.
- Block G:** File List area.

Additional interface elements include a 'Show Log Window' button and a 'View Log' checkbox.

Idx	Type	SID	NID	Count	Connect
1	CAN 2.0A	0	0	3	
2*	CAN 2.0A	7	7	1	OK
3	CAN 2.0B	102	3	1	
4	DroneCAN	3	3	1	

Idx	UUID	ID1	ID2
1	48 43 41 54 E...	0	0

Block A: DPC-CAN Port selection, open/close com port.

Block B: Scan Button.

Note: Checkbox "Use Stream Off"

- This checkbox need for FW Ver < 1.5(0)
- The Pause Stream feature was added in version 1.5(0).

Block C: option CAN ID for FW Update

Block D: Test Button for selected servo in Servo List

-30 deg, 0 deg, +30 deg in Servo Mode

0 deg = pos 8192

Block E: Scanned Servo List

Block F: UID List

UID broadcasting was added in FW Ver 1.9(0) (2022_03_09).

Block G: File List:

This list used by Firmware Update in App.

2. Connect servos to DPC-CAN

3. Scan Servos

Select DPC-CAN's Port and Click button Open (Block A)

Click Button "Scan" (Block B)

Auto scan process:

- Set CAN baudrate (First 1000 kbps)
- Send Pause Stream command or Stream Mode = OFF command.
- Send three type CAN Packets for CAN 2.0A, CAN 2.0B, DroneCAN.
- Wait Servo's return packets.
- Stop if any servo found.
- Repeat to first step.

Servo List (of Block E) will display scanned servos.

Click first line (idx = 1) Servo:

Servo List:					
Idx	Type	SID	NID	Count	Connect
1*	CAN 2.0A	0	0	3	NO
2	CAN 2.0A	7	7	1	Disconnect
3	CAN 2.0B	102	3	1	
4	DroneCAN	3	3	1	

Click second line:

Servo List:					
Idx	Type	SID	NID	Count	Connect
1	CAN 2.0A	0	0	3	
2*	CAN 2.0A	7	7	1	OK
3	CAN 2.0B	102	3	1	
4	DroneCAN	3	3	1	

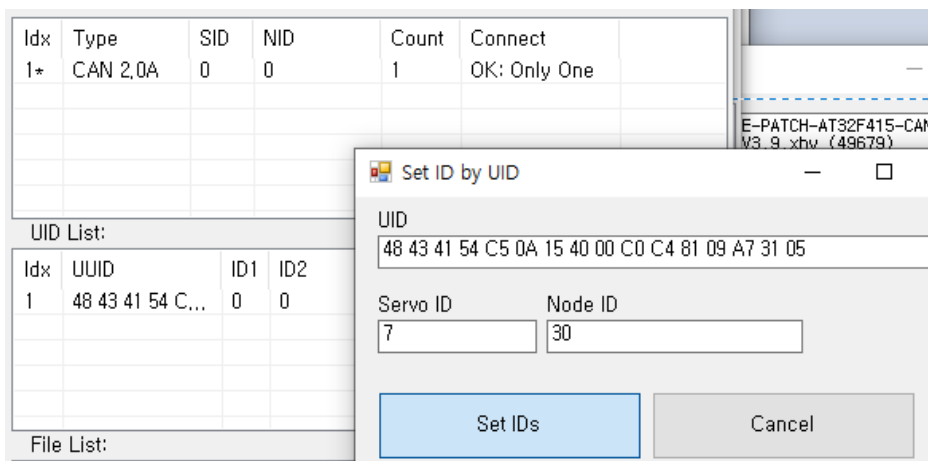
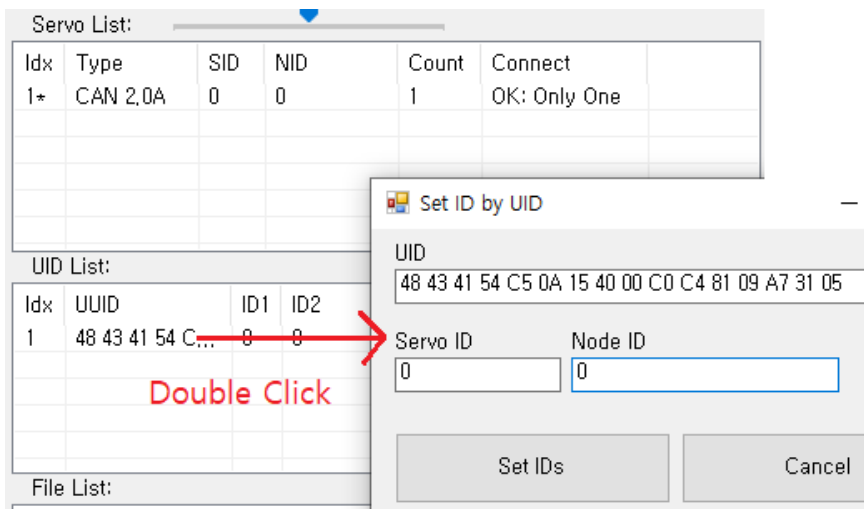
Example of selecting a servo whose ID cannot be distinguished

Left Center Right					
ootloader Servo List:					
Idx	Type	SID	NID	Count	Connect
1	CAN 2.0B	102	3	1	Disconnect
2*	CAN 2.0B	0	3	1	NO

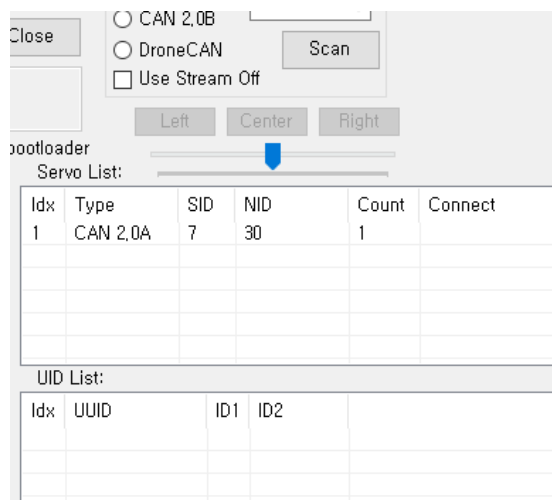
Since Servo ID = 0 and Node ID is the same as 3, if a command is sent to Servo 2, Servo 1 is also received. Therefore, in order to change the setting value of servo no.2, the connection of servo no.1 must be disconnected.

4. Set Servo ID & Node ID by UID

This function was added in FW Ver 1.9(0) (2022_03_09).

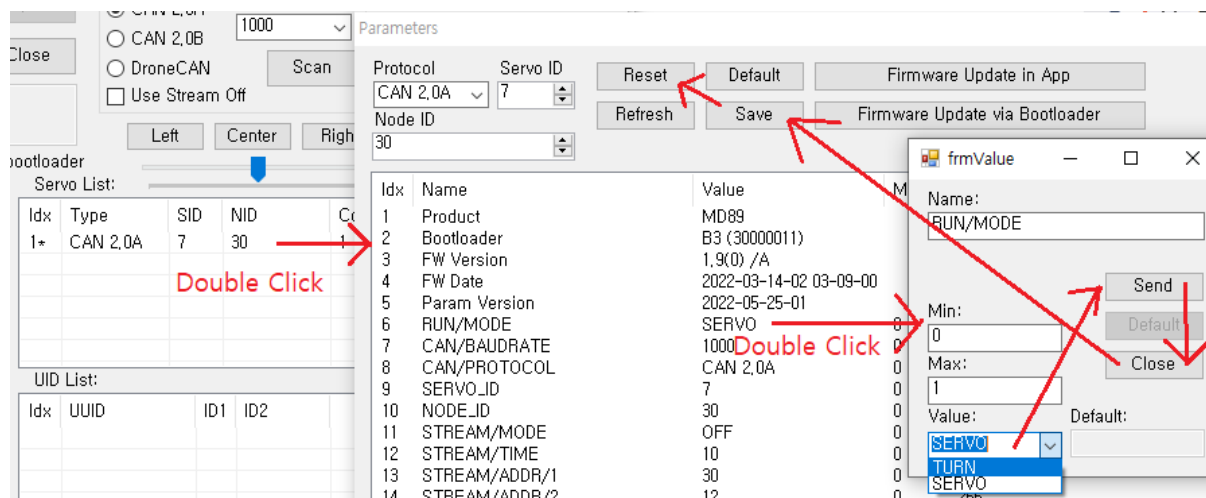


Type Servo ID and Node ID, click Set IDs, click cancel. Scan again:



This function use CAN 2.0A packet: CAN ID = 0x7FF and 0x7FE.

5. View & Edit Parameters of Servo



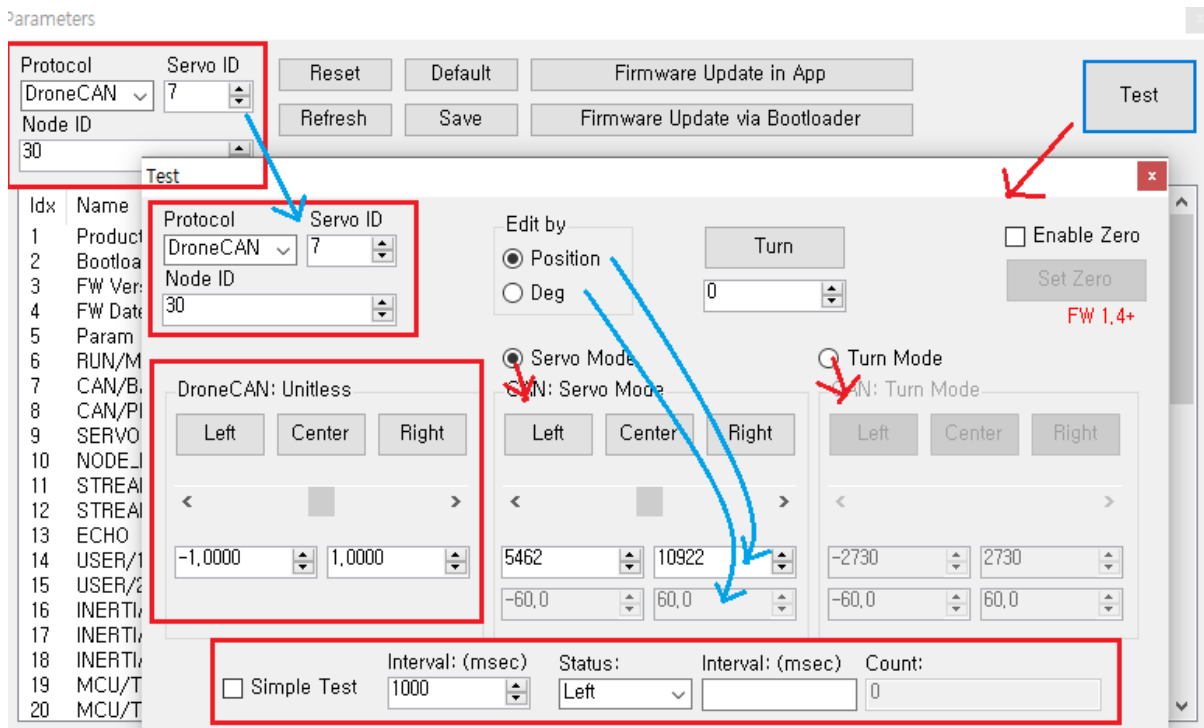
Firmware Update in App: FW Ver 1.9(0)+ and Servo ID > 0, Node ID > 0

Firmware Update via Bootloader: FW Ver 1.4(1)+ and Bootloader Type is B3

After updating the firmware, the procedure to update the parameters is not yet complete, so additional modifications will be made.

In case of update failure, you must use the method of directly connecting to the bootloader, and for now, you must use a different UI. Be careful not to turn off the servo power, cut the CAN connection, or cause problems with the computer in the middle of the update.

6. Test Window



If you press the Test button in the parameter window, the test window appears.

In Servo Mode, the target position 8192 is 0 deg, and in Turn Mode, the starting position 0 is 0 deg. Checkbox The origin of transmission is different in Servo Mode and Turn Mode. When the Test window is displayed, it is automatically selected based on the RUN MODE read from the Param window.

Checkbox Simple Test If you press and hold, it moves continuously in the order of Left → Center → Right → Center. Interval If you specify a msec value, you can adjust the interval.

The Set Zero button changes the current position to the center position of Servo Mode. That is, it becomes the position to move from the target position 8192. CAUTION: After testing, you must perform the Save procedure. Supported by FW Ver 1.4(0) or later.

END