FEATURES ON ASDA-B2

Contents

The Whole Series

Features of B2

Product Hierarchical

Responsive Ability

ASDA-A2
1280000 p/rev
(20 bit)
1000Hz
200 w ~5. 5 kw

ASDA-B2
160000 p/ rev
(17 bit)
550Hz
100 w ~ 3 kw

ASDA-A+
1280000 p/rev
(17/20 bit)
550Hz
4. 5 kw ~7. 5 kw

ASDA-A
10000 p/rev
450Hz
100 w ~ 3 kw

ASDA-AB
10000 p/rev
450Hz
100 w ~ 2 kw

ASDA-B
10000 p/rev
250Hz
100 w ~ 2 kw

Encoder Resolution

Front View of ASDA-B2

Display

Control Buttons

Control Power

RST Power

PLC

D-SUB

44 pins

Terminal Board

ECMA Motor

D-SUB

9 pins

Encoder

1394

6 pins

ASDA-Soft

Regenerative Resistor

MODBUS

RS-485/RS-422

ASDA-B2 Main Features

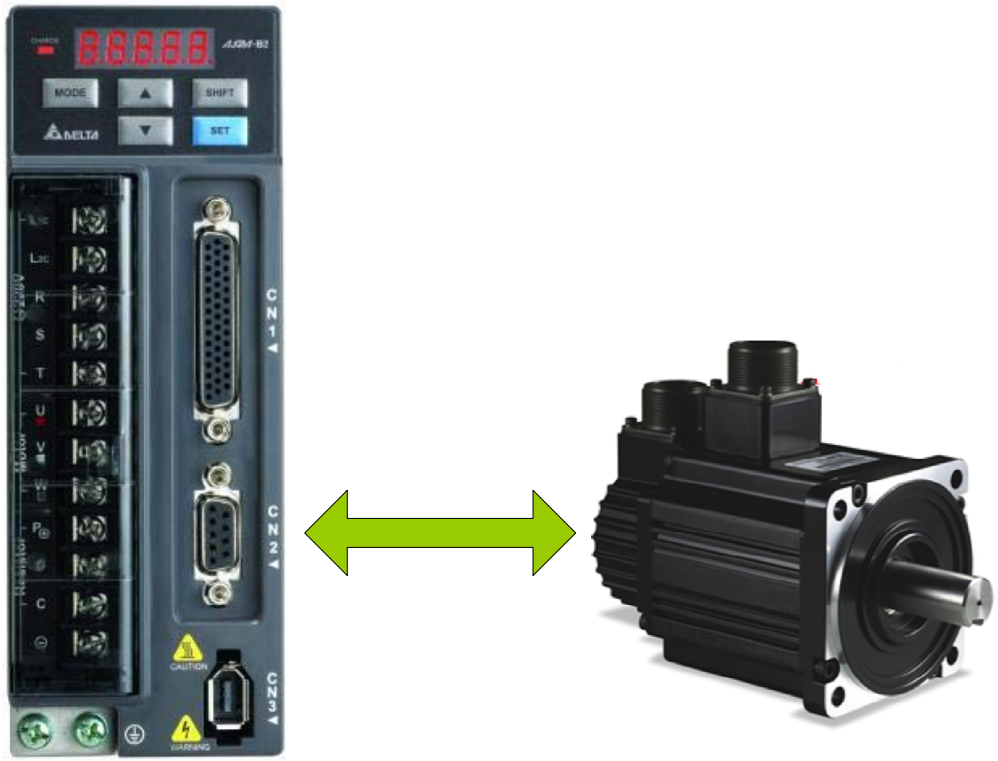
High Price/Performance Ratio Servo (0.1 KW ~ 3.0 KW)

- High resolution encoder (17-bit level, 160000 pulse/rev).
- Output pulse high to 160000 pulse/rev (AB phase) .
- Support input frequency command high to 4 Mpps.
- 9 digital inputs and 6 digital outputs.
- 2 analog inputs and 2 analog outputs.
- Bandwidth 550Hz and 3 Notch Filters supported.
- Friction compensation and bumping protection.
- Position, speed, and torque operation modes.

High Accuracy Encoder

High Precision and Good Low Speed Characteristic

- **17-bit level, 160000 pulse/revolution.**



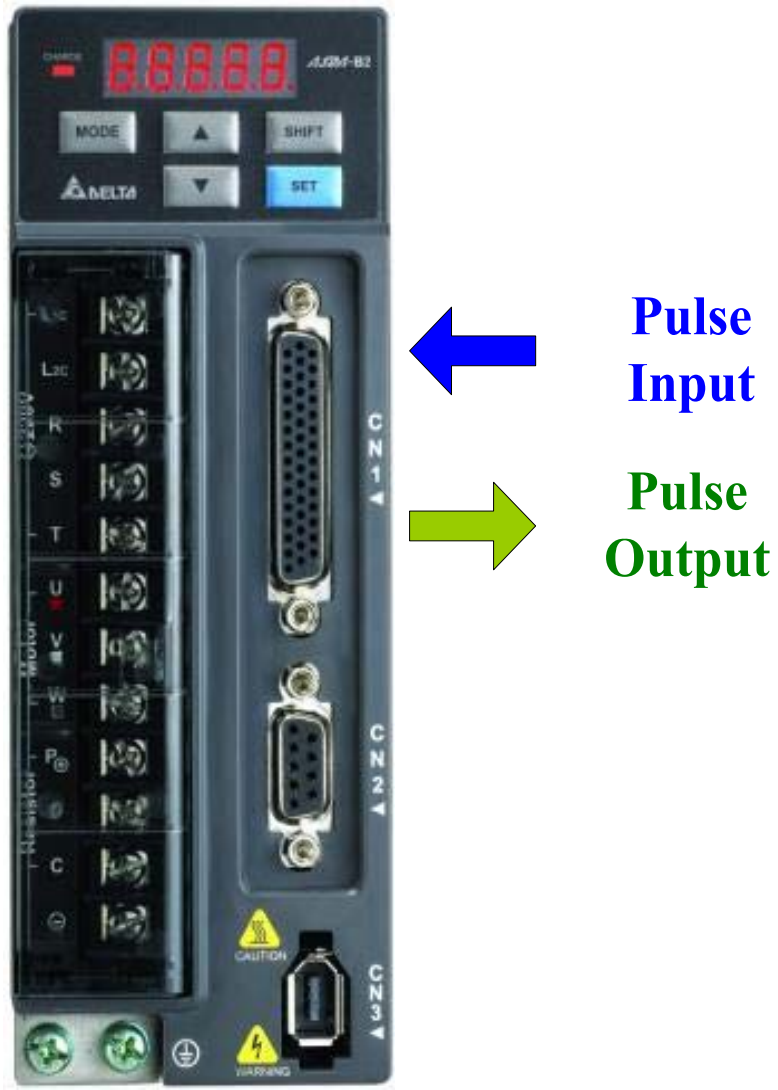
High Frequency Pulse Train

The Frequency of Input Pulse Train

- Frequency could be high to 4 M pps.
- Open collector is 200 K pps.

The Output Pulse Train

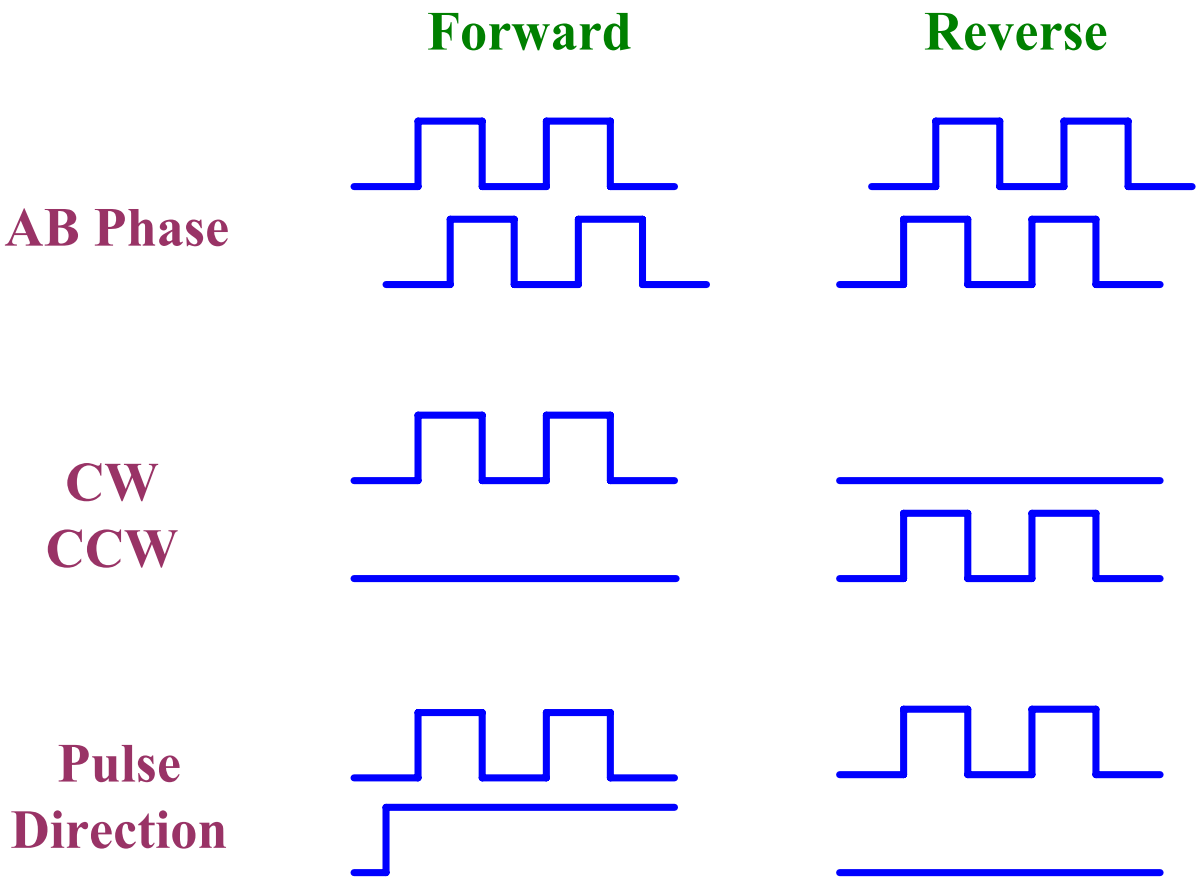
- The highest frequency is 160000 pulse/rev.



Diversity Kinds of Pulse

Signal and Frequency

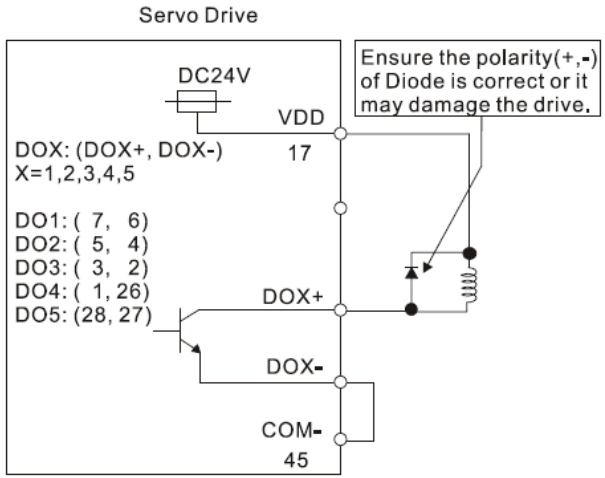
- **Line drive: 500 Kpps / 4 Mpps (2 channels).**
- **Open collector: 200 Kpps.**



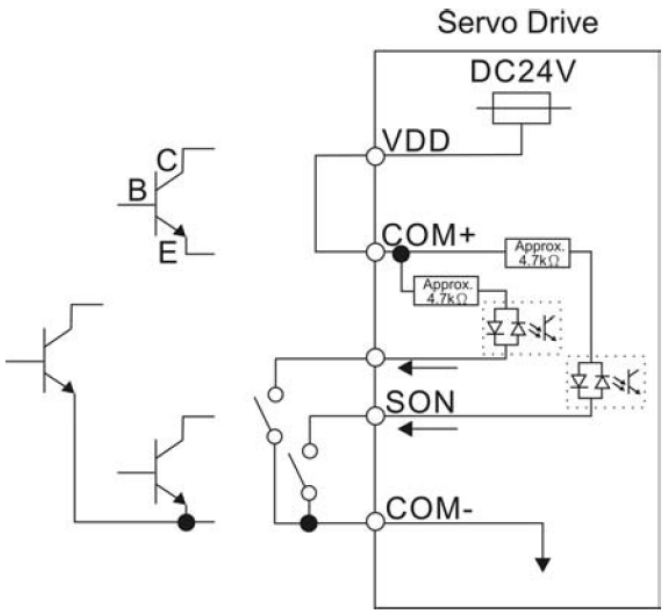
Digital Inputs and Outputs (1)

9 digital inputs and 6 digital outputs

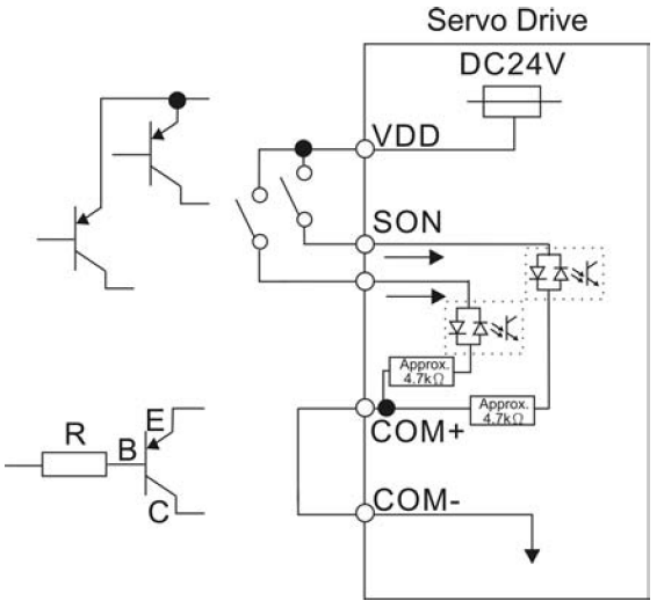
- **Both PNP & NPN supported.**
- **Dry contact for output.**



NPN/ Sink



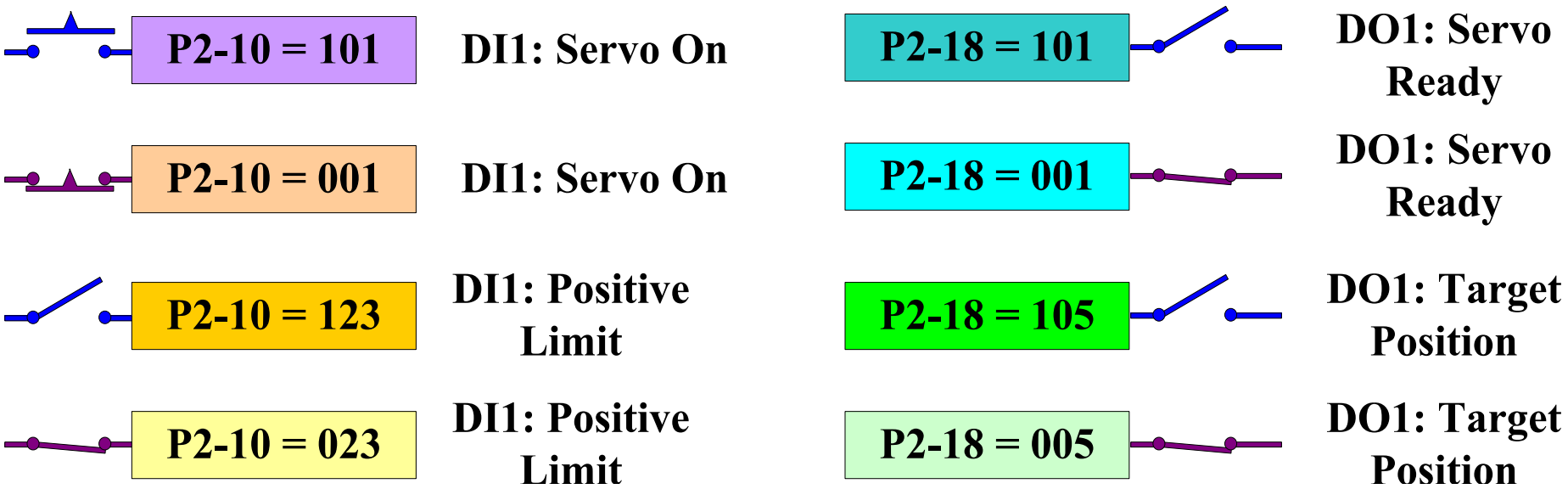
PNP/ Source



Digital Inputs and Outputs (2)

Programmable Inputs and Outputs

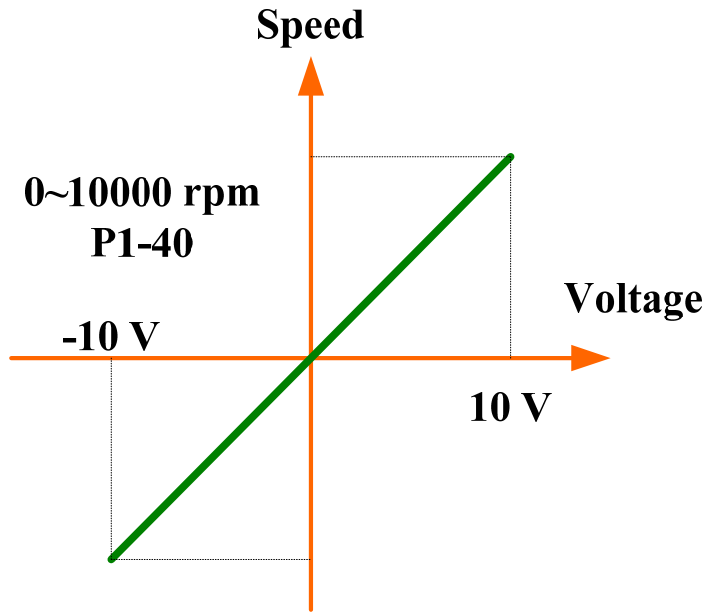
- More flexibility and efficiency of using DI/O.
- Function expanded by function code assigned.



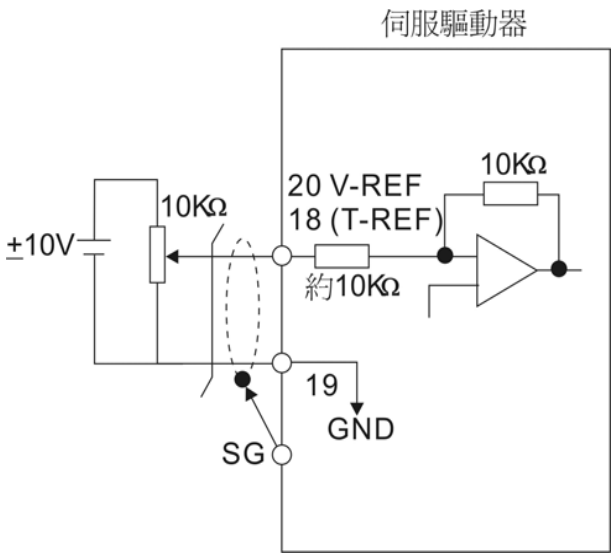
Two Analog Input Channels

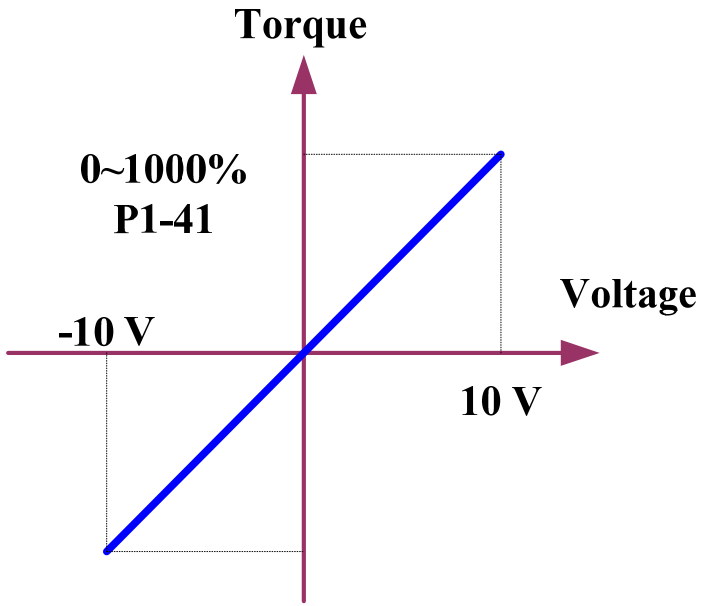
Voltage control Torque or Speed

- Voltage range: -10V ~10V.
- Resolution: 12 bits, 4096 steps.
- The scaling for every step is adjustable.



Analog input channel

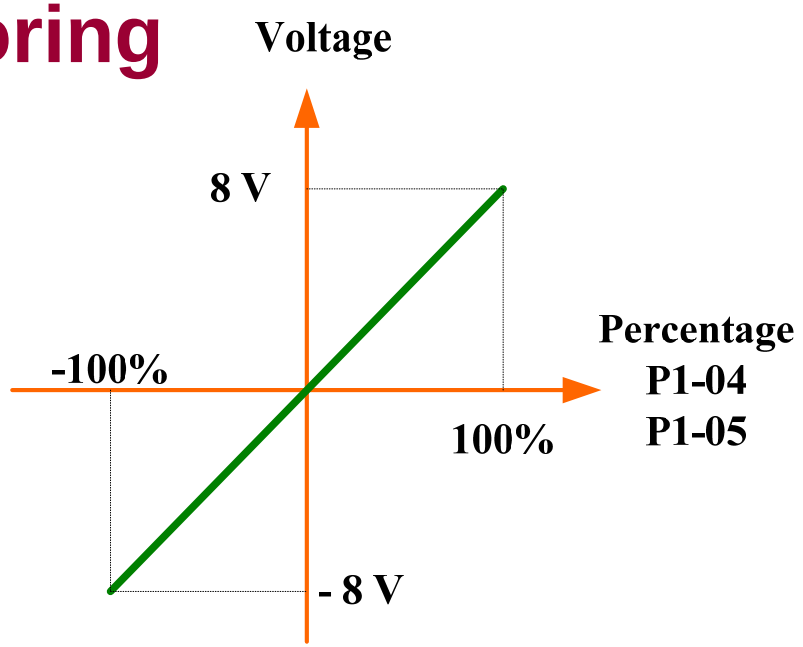




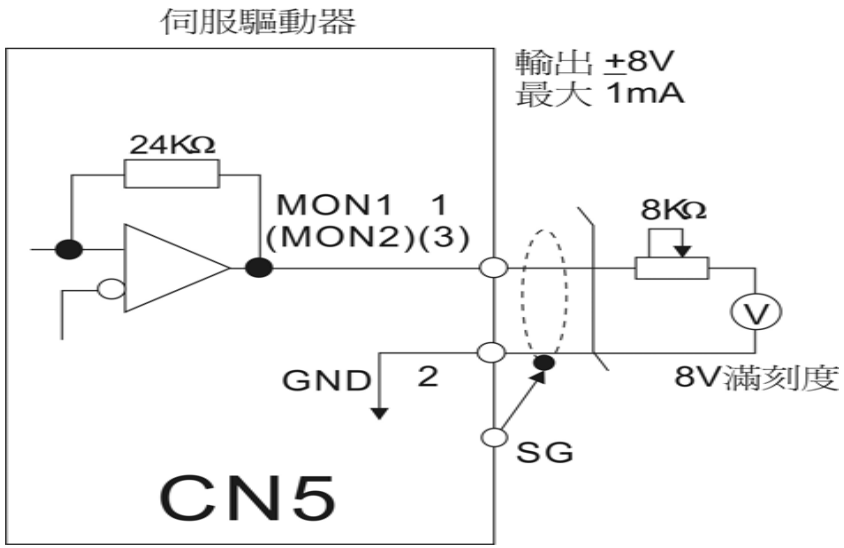
Two Analog Output Channels

Analogous voltage for monitoring

- Range: -8V ~8V.
- Programmable for channel function.
- 10-bit resolution.



Analog output channel



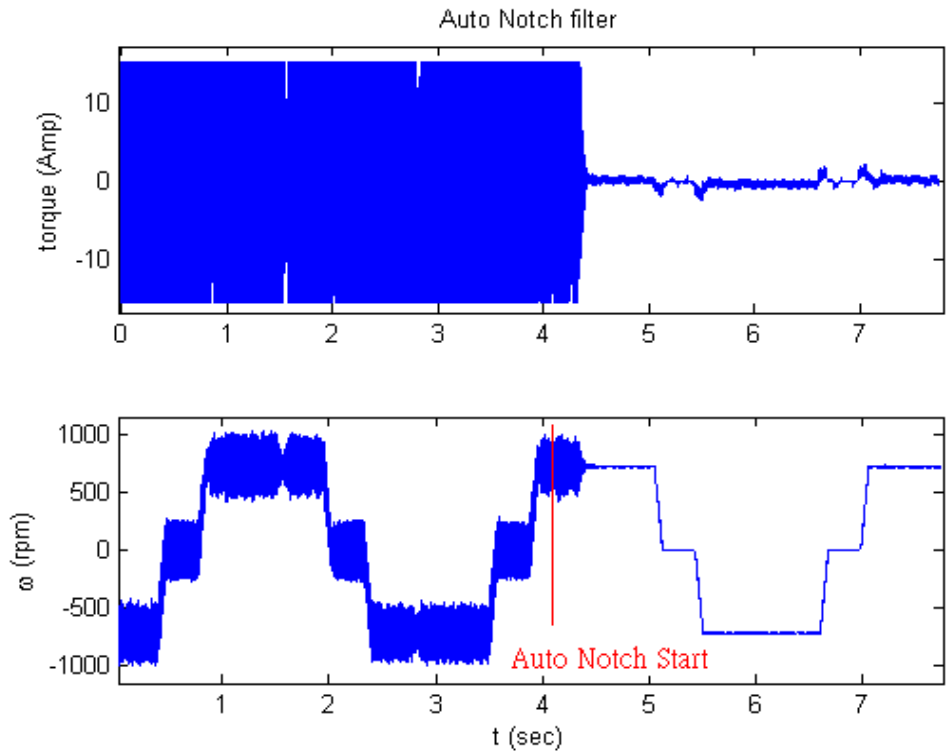
Item selected P0-03

0: Speed
1: Torque
2: Frequency of input command
3: Speed command
4: Torque command
5: V-Bus

Outstanding Suppression Ability

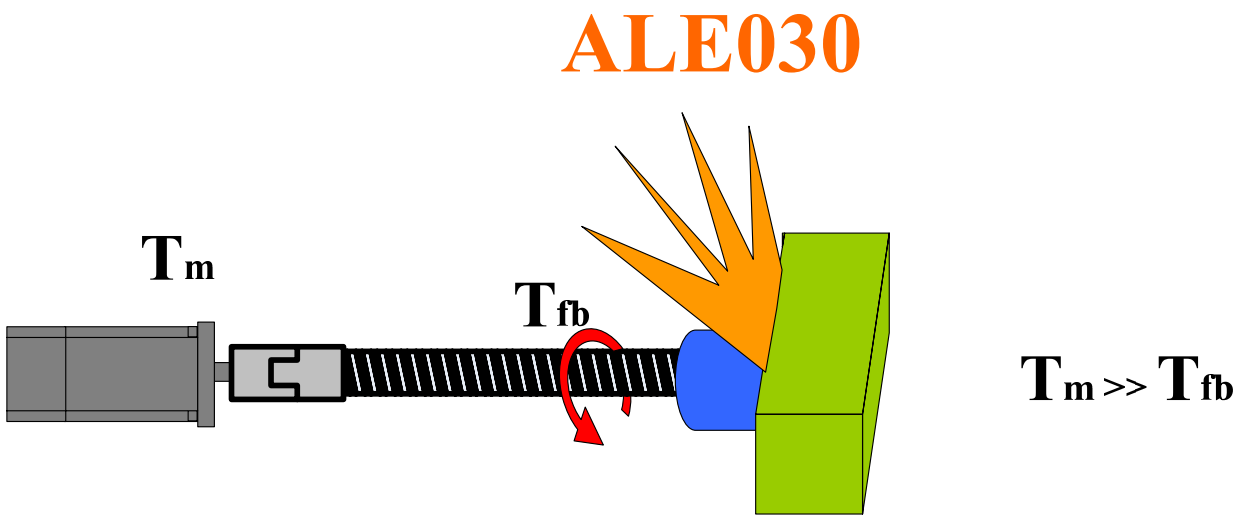
The Notch Filter

- **Two Auto Notch Filters and one manual Notch Filter.**
- **Use to suppress down the system resonance.**



The Bumping Protection

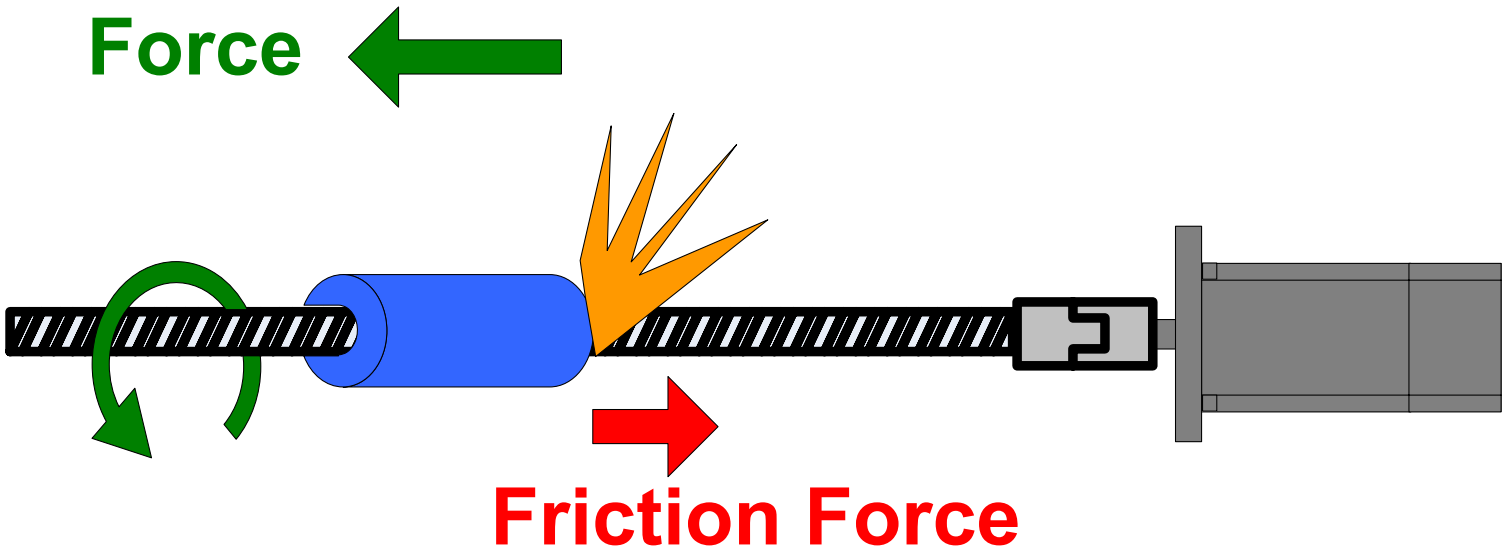
Protection of Impact



P1-57: Level of bumping force (0~300%)
P1-58: The threshold of bumping time (0~1000ms)

The Friction Force Compensation

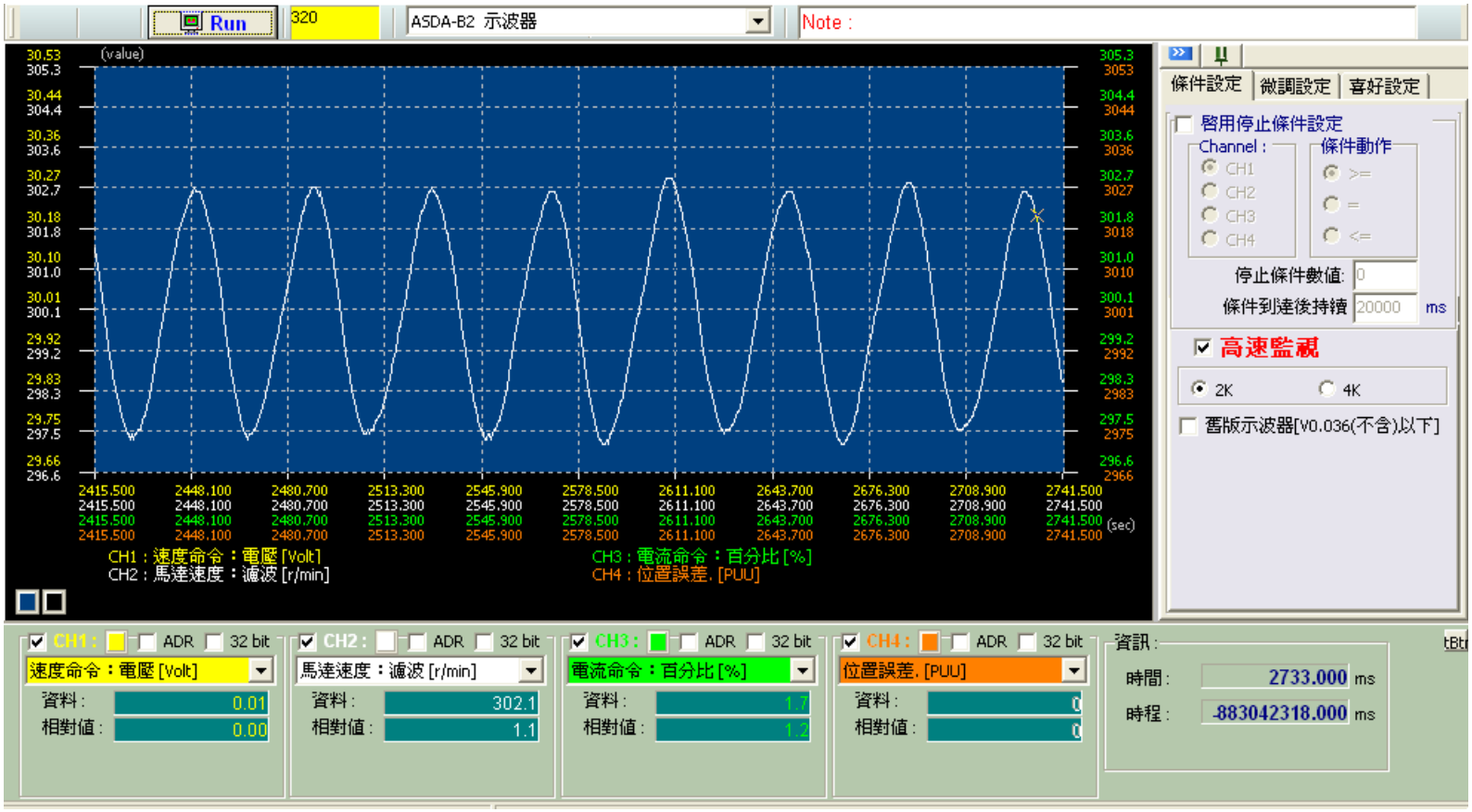
Reduce the Affection of Friction Force



The Software

Parameter Editor and Scope

- **Help integrated parameter editor.**
- **4 channel scope with sampling rate 2 KHz.**



The Operation Modes

Position, Speed, and Torque Modes

- **PT: Position**
- **S: Speed**
- **T: Torque**
- **Sz：Zero/ Internal speed mode**
- **Tz：Zero/ Internal torque mode**

Mode	PT	S	T	Sz	Tz
Single Mode					
00	✓				
01					
02		✓			
03			✓		
04				✓	
05					✓
Multiple Mode					
06	✓	✓			
07	✓		✓		
08					
09					
0A		✓	✓		

Thank You.

Revision: Feb. 21, 2011