

April 14, 2021

Industrial Device Business Division,  
Industrial Solutions Company  
Panasonic Corporation

**Software Update Notice**  
**for AC Servo Driver (MINAS A6SE/A6SF/A6SG Series)**

Thank you for your daily support and efforts to our business.  
As described below, we will update the software version for MINAS A6SE, A6SF and A6SG Series (\*special order products).  
We would appreciate your understanding and cooperation with this matter.

- Affected Models: Servo drivers of all MINAS A6SE, A6SF and A6SG series (\*special order products)  
Part number

**M \* D L \* \* \* S \***

Starting with "M", "DL" as the 3rd and 4th characters, "S" as the 8th character, "E", "F" or "G" as the 9th character from the left.

- Description of the Change and Reason:  
The software version will be updated from Ver1.11 to Ver1.12 for functionality improvement purposes.

No.	Function	Ver1.11	→	Ver1.12
1	Special function selection added	<Pr6.28 "Special function selection"> 0: Block operation disabled(Pulse train enabled) 1: Block operation by Modbus communication enabled. (Pulse train disabled) 2: Block operations by input signal enabled(Pulse train disabled)		<Pr6.28 "Special function selection"> 0: Block operation disabled(Pulse train enabled) 1: Block operation by Modbus communication enabled. (Pulse train disabled) 2: Block operations by input signal enabled(Pulse train disabled) <b>4: Block operations by input signal enabled(Pulse train enabled)</b>
2	Expansion of return to origin method	<Method for detection of origin location> 1: Leading edge reference of vicinity of origin sensor (HOME) + z phase 2: Leading edge reference of vicinity of origin sensor (HOME)		<Method for detection of origin location> 1: Leading edge reference of vicinity of origin sensor (HOME) + z phase 2: Leading edge reference of vicinity of origin sensor (HOME) <b>15: Actual position setup</b>
3	Position compare function enhancement	Non-responsive		<Pr5.94 "Position compare output conditions setup"> 0:Enabled both in positive and negative directions 1:Enabled only when operated in positive direction 2:Enabled only when operated in negative direction
4		<Parallel I / O connector input> Non-responsive		<Parallel I / O connector input> Signal name: Position compare switch input Symbol: CMP-SEL a-contact: 17h, b-contact: 97h

No.	Function	Ver1.11	→	Ver1.12
5	Torque / position control switching expansion by C-MODE.	<Pr6.97 "Function expansion setting 3"> bit 5: For manufacturer use		<Pr6.97 "Function expansion setting 3"> You can use as bit 5: "Mode switching limit function"

\* Refer to the below for details of Changed Content.

[Detail of Changed Content]

#### No. 1) Special function selection added

Added a mode that enables Block operation when position is controlled by pulse train input.

This makes it possible for the amplifier to return to the origin when the position is controlled by the pulse train input.

If you use it within the range of the conventional specifications, you can use it as it is.

#### No. 2) Expansion of return to origin method

"Actual position set" has been added to the setting of the origin position detection method.

This makes it possible to control the position with the origin position detected by the host device as the position "0".

If you use it within the range of the conventional specifications, you can use it as it is.

#### No. 3) Position compare function enhancement

Added the function to limit the position compare output according to the rotation direction of the motor.

If you do not use this function (Pr5.94 = 0), you can use the conventional function.

#### No. 4) Position compare function enhancement

Added the function to enable / disable the position compare output by the input signal.

It can be assigned to pin 50 of the interface connector X4. Allocation is possible with parameter settings SI1 to SI10.

If you do not use this function, you can use the conventional function.

#### No. 5) Torque / position control switching expansion by C-MODE.

Regardless of the speed zero clamp input, C-MODE allows switching from torque control to position control.

It can be used by setting bit15 = "1" of Pr6.97.

At factory settings, the interface connector X4 has 26 pins for "zero speed clamp input (ZEROSPD)" and 32 pins for "control mode switching input (C-MODE)".

If you do not use this function (Pr6.97 bit15 = 0), you can use the conventional function.

Refer to the following manuals for further information.

- SX-DSV03031: MINAS A6 Series Technical Reference - Functional Specification -
- SX-DSV03042: MINAS A6 Series Technical Reference - Modbus communication and Block operation specification -
- SX-DSV03283: MINAS A6 Series Technical Reference - Functional Specification -

(Frame size V, DC24 / 48 V \* Special Order Products (For specific customers))

[Technical reference manuals download](#)

[https://www3.panasonic.biz/ac/e/dl/manual/index.jsp?series\\_cd=3514](https://www3.panasonic.biz/ac/e/dl/manual/index.jsp?series_cd=3514)

- Setup support software (PANATERM) for Ver1.12 will be available from Ver 6.0.4.0 onward.
- Previously offered functions can be used by setting up the previous parameter file for the driver.

■ Timing: The change will be made from the production lot in June 2021.

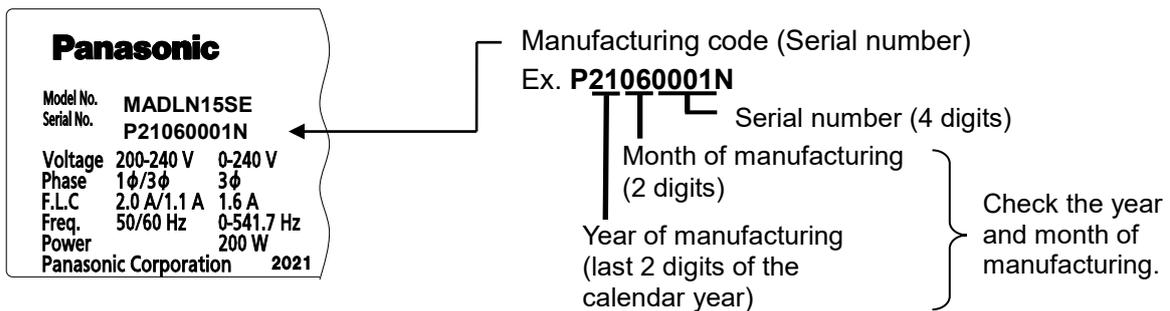
■ Method of checking:

• Method involving checking the software version

The software version can be checked by using the setup support software (PANATERM), or by using the monitor mode on the front panel.

• Method of checking the year and month of manufacturing from the manufacturing code (serial number)

The manufacturing code (serial number) shown on the name plate located on the side of the product conforms to the following rule.



The manufacturing code (serial number) shown on the label attached to the front surface of the package box follows the following rule.

