

Panasonic MINAS A4

Supported Series: Panasonic MINAS A4 series Servo Drive.

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Panasonic MINAS A4		
PLC I/F	RS232		
Baud rate	9600	2400 ~ 57600	
Data bits	8		
Parity	None		
Stop bits	1		
Axis no.	0 (master station only)	0 ~ F (slave)	

Device Address:

Bit/Word	Device type	Format	Range	Memo
B	Command 20	D	0 ~ 7	States (Note 3)
B	Command 27	DD	0 ~ 31	Input Signal (Note 3)
B	Command 28	DD	0 ~ 31	Output Signal (Note 3)
W	Command 01	D	0	CPU Version (Numeric format:16-bit Hex)
W	Command 05	DD	0 ~ 11	Driver Version (ASCII / 12 words)
W	Command 06	DD	0 ~ 11	Motor Version (ASCII / 12 words)
W	Command 21	D	0 ~ 1	command pulse counter (Numeric format: 32-bit Signed)
W	Command 22	D	0 ~ 1	feedback pulse counter (Numeric format: 32-bit Signed)
W	Command 24	D	0	present speed (Numeric format: 16-bit Unsigned)
W	Command 25	D	0	present torque (Numeric format: 16-bit Unsigned)
W	Command 26	D	0 ~ 1	present deviation counter (Numeric format: 32-bit Signed)
W	Command 84	D	0	write parameter to EEPROM (Note 1)
W	Command 90	D	0	present Alarm Data

Bit/Word	Device type	Format	Range	Memo
				(Numeric format: 16-bit Unsigned)
W	Command 91	DD	1 ~ 14	Alarm History (Note 4) (Numeric format: 16-bit Unsigned)
W	Command 92	DD	1 ~ 14	Batch Alarm (Note 4) (Numeric format: 16-bit Unsigned)
W	Command 93	D	0	clear Alarm History (include EEPROM) (Note 1)
W	Command 94	D	0	Alarm Clear (Note 1)
W	Command 9B	D	0	Absolute Clear (Note 1)
W	Parameter	HH	0 ~ 7f	Individual Parameter (range: 0x00 ~ 0x7F) (Note 2)
W	Comm2D_S	D	0 ~ 1	Command 2D Single turn data (Numeric format: 32-bit Signed)
W	Comm2D_M	D	0 ~ 1	Command 2D Multi-turn data (Numeric format: 32-bit Signed)

Note:

1. Command 84, Command 93, Command 94, and Command 9B are write only. (These commands are able to use Set Bit Object and execute the write command after triggering Set Bit Object.). Commands other than these four are read only.
2. Parameter read/write: Use device type to define address control from 00~7F.
For example: "address_00" is mapping to "Parameter_00".
(Please refer to Panasonic MINAS A4 Series User Manual.)
3. Device address type can define MINAS A4 Driver's command list.
Command 20, Command 27, and Command 28 are Bit type, use "Operating range" to map communication order status.
For example: "Command 20_3" means "Read state_CCW".
(Please refer to Panasonic MINAS A4 Series User Manual.)
4. Command 91 and Command 92 are word type, use "Operating range" to map the record of 14 alarms.
For example: "Command 91_1" means "Read alarm data_First alarm".

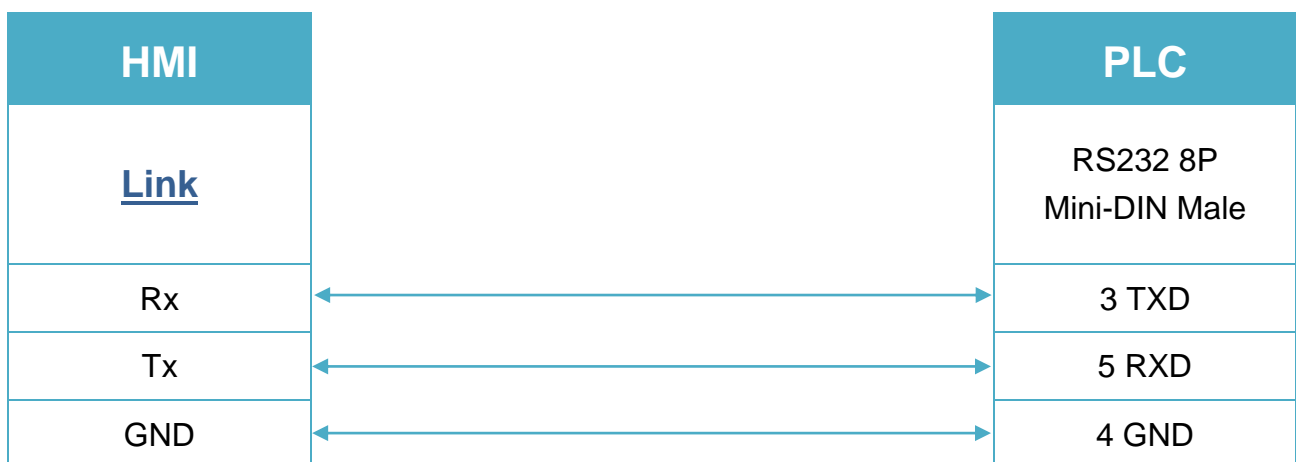
Wiring Diagram:


Diagram 1

RS-232 (MINAS A4 Driver CNX4 Port)

The serial port pin assignments may vary between HMI models, please click the following link for more information.

The following is the view from the soldering point of a connector.



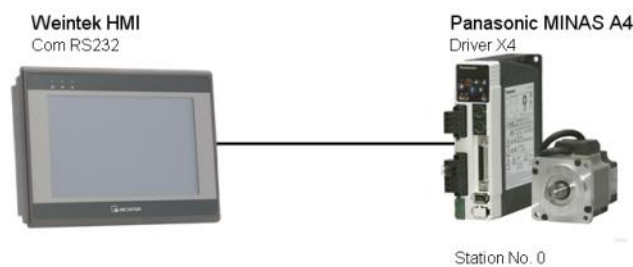
 <p>8P Mini-Din Male MINAS A4 Driver CNX3 / CNX4 Port</p>	MINAS A4 Driver CNX3 Port	MINAS A4 Driver CNX4 Port
		3 TX
		5 RX
	4 GND	4 GND
	7 D-	7 D-
	8 D+	8 D+

RS485 cable / DVOP1970-005

MINAS A4 Driver 8p Mini-DIN Male		MINAS A4 Driver 8p Mini-DIN Male
7 D-		7 D-
8 D+		8 D+
4 GND		4 GND

RS232 cable / DVOP1960

MINAS A4 Driver 9P D-SUB Female		MINAS A4 Driver 8p Mini-DIN Male
3 RXD		5 RXD
2 TXD		3 TXD
5 GND		4 GND

HMI connect with one Device

HMI connect with multi devices
