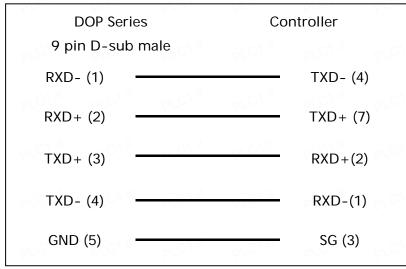# Mitsubishi FX3U

HMI Factory Setting:

Baud rate: 9600, 7, Even, 1

Controller Station Number: 0 (no PLC station number in protocol, therefore, only 1(HMI) to 1(PLC) communication is allowed.)
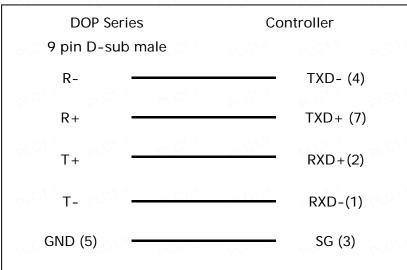
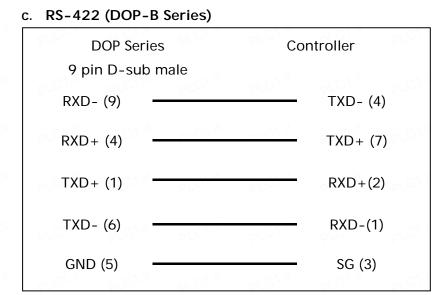Control Area / Status Area: D0 / D10

Connection

a. RS-422 (DOP-A/AE Series)

DOP Series 9 pin D-sub male		Controller
RXD- (1)	————	TXD- (4)
RXD+ (2)	————	TXD+ (7)
TXD+ (3)	————	RXD+ (2)
TXD- (4)	————	RXD- (1)
GND (5)	————	SG (3)

b. RS-422 (DOP-AS35/AS38/AS57 Series)

DOP Series 9 pin D-sub male		Controller
R-	————	TXD- (4)
R+	————	TXD+ (7)
T+	————	RXD+ (2)
T-	————	RXD- (1)
GND (5)	————	SG (3)

c. RS-422 (DOP-B Series)

DOP Series 9 pin D-sub male		Controller
RXD- (9)	————	TXD- (4)
RXD+ (4)	————	TXD+ (7)
TXD+ (1)	————	RXD+(2)
TXD- (6)	————	RXD-(1)
GND (5)	————	SG (3)

d. RS-232 (DOP-B Series)

DOP Series 9 pin D-sub male		Controller FX_{3U}-RS232-BD
RXD (2)	————	(3) SD[TXD]
TXD (3)	————	(2) RD[RXD]
GND (5)	————	(5) SG

e. RS-485 (DOP-B Series)

DOP Series 9 pin D-sub male — Controller FX_{3U}-RS485-BD

	Controller
	(1) SDA
TXD+ (1)	(5) RDA
	(3) SDB
TXD- (6)	(7) RDB
GND (5)	(2) SG

Definition of PLC Read/Write Address

a. Registers

Type	Format Word No. (n)	Read/Write Range	Data Length	Note
Auxiliary Relay	**M**n	**M**0 – **M**7664	Word	1
Special Auxiliary Relay	**M**n	**M**8000 – **M**8496	Word	1
Status Relay	**S**n	**S**0 – **S**4080	Word	1
Input Relay	**X**n	**X**0 – **X**360	Word	Octal, 1
Output Relay	**Y**n	**Y**0 – **Y**360	Word	Octal, 1
Timer PV	**T**n	**T**0 – **T**511	Word	
16-bit Counter PV	**C**n	**C**0 – **C**199	Word	
32-bit Counter PV	**C**n	**C**200 – **C**255	Double Word	
Data Register	**D**n	**D**0 – **D**7999	Word	
Special Data Register	**D**n	**D**8000 – **D**8511	Word	
Extension Register	**R**n	**R**0 – **R**32767	Word	

b. Contacts

Type	Format Bit No. (b)	Read/Write Range	Note
Auxiliary Relay	**M**b	**M**0 – **M**7679	
Special Auxiliary Relay	**M**b	**M**8000 – **M**8511	
Status Relay	**S**b	**S**0 – **S**4095	
Input Relay	**X**b	**X**0 – **X**377	Octal
Output Relay	**Y**b	**Y**0 – **Y**377	Octal
Timer Flag	**T**b	**T**0 – **T**511	
Counter Flag	**C**b	**C**0 – **C**255	

NOTE

1) The device address must be the multiple of 16.