

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

**c. RS-422 (DOP-B Series)**

DOP Series		Controller
9 pin D-sub male		
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		Controller
9 pin D-sub male		FX <sub>3U</sub> -RS232-BD
RXD (2)	—————	(3) SD[TXD]
TXD (3)	—————	(2) RD[RXD]
GND (5)	—————	(5) SG

**e. RS-485 (DOP-B Series)**

DOP Series		Controller
9 pin D-sub male		FX <sub>3U</sub> -RS485-BD
		(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	Read/Write Range	Data Length	Note
	Word No. (n)			
Auxiliary Relay	Mn	M0 – M7664	Word	<a href="#">1</a>
Special Auxiliary Relay	Mn	M8000 – M8496	Word	<a href="#">1</a>
Status Relay	Sn	S0 – S4080	Word	<a href="#">1</a>
Input Relay	Xn	X0 – X360	Word	Octal, <a href="#">1</a>
Output Relay	Yn	Y0 – Y360	Word	Octal, <a href="#">1</a>
Timer PV	Tn	T0 – T511	Word	
16-bit Counter PV	Cn	C0 – C199	Word	
32-bit Counter PV	Cn	C200 – C255	Double Word	
Data Register	Dn	D0 – D7999	Word	
Special Data Register	Dn	D8000 – D8511	Word	
Extension Register	Rn	R0 – R32767	Word	

**b. Contacts**

Type	Format	Read/Write Range	Note
	Bit No. (b)		
Auxiliary Relay	Mb	M0 – M7679	
Special Auxiliary Relay	Mb	M8000 – M8511	
Status Relay	Sb	S0 – S4095	
Input Relay	Xb	X0 – X377	Octal
Output Relay	Yb	Y0 – Y377	Octal
Timer Flag	Tb	T0 – T511	
Counter Flag	Cb	C0 – C255	

 **NOTE**

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