Mitsubishi Q00/Q00UJ/Q01/QJ71

Supported Series: Mitsubishi Q series PLC with QJ71C24 communication module, Q00, Q00J, Q00UJ, Q01, Q02H, Q06H, Q12H, Q25H, Q12PH, Q25PH CPU port.
Website: http://www.mitsubishi-automation.com

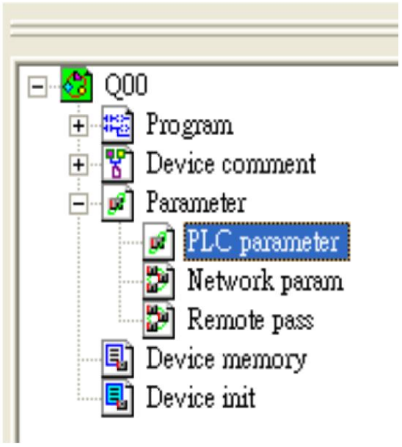
HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi Q00/Q00UJ/Q01/QJ71		
PLC I/F	RS232	RS485 2W/4W, RS232	
Baud rate	9600	9600~115200	
Data bits	8		
Parity	Odd		
Stop bits	1		
PLC sta. no.	0		

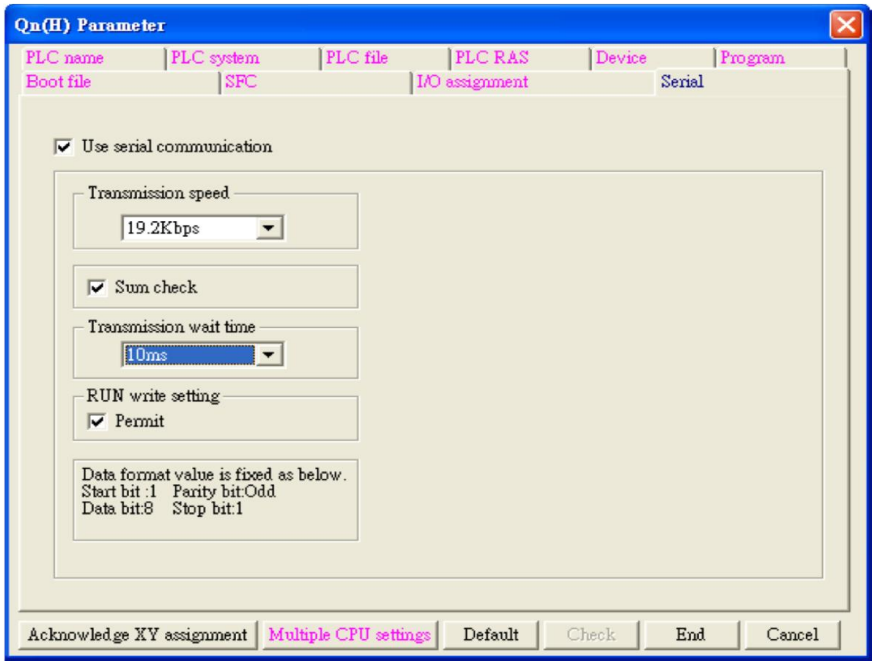
Online simulator	Yes	**Extend address mode**	NO

PLC Setting:

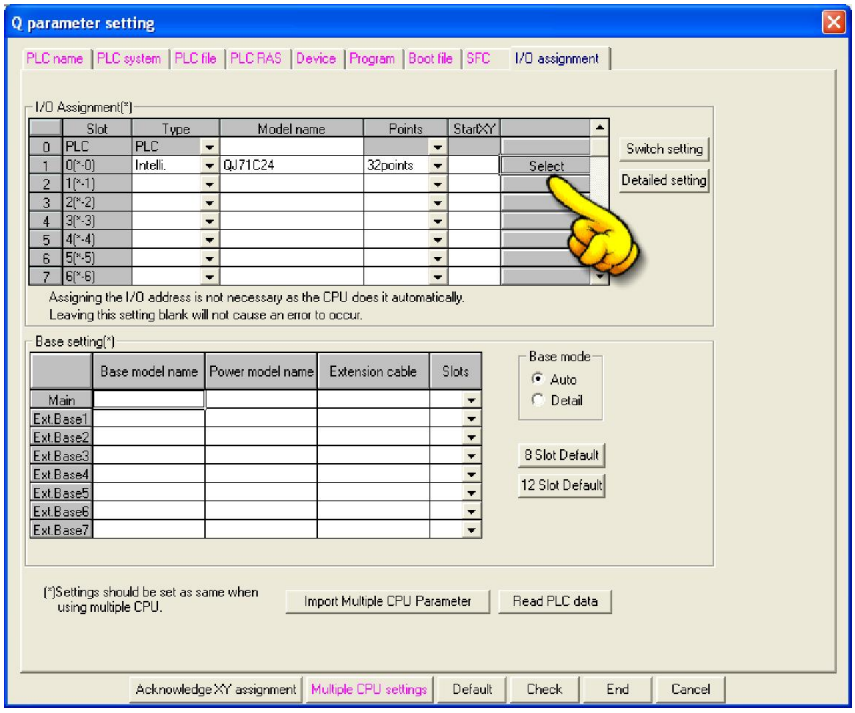
Q00, Q01 CPU port setting:

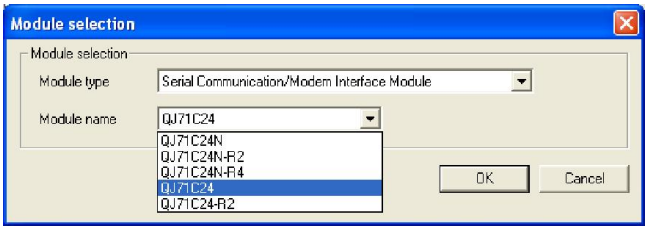


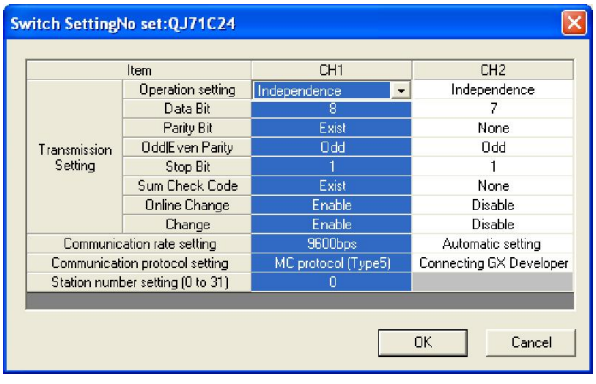
1. In GX Developer “PLC data list” click [PLC parameter].
2. In “PLC parameter” go to [Serial] page.
3. Select [Use serial communication].
4. Set [Transmission speed] to 9600~115200.
5. Select [Sum check].
6. Set [Transmission wait time] to 10ms.
7. Permit [RUN write setting].
8. Click [End] to close the dialog.
9. Write the PLC Parameter to PLC.
10. Reset PLC, the parameter will be actived.



QJ71 setting:







Device Address:

Bit/Word	Device type	Format	Range	Memo
B	X	HHHH	0 ~ 1fff	Input Relay
B	Y	HHHH	0 ~ 1fff	Output Relay
B	M	DDDDD	0 ~ 61439	Internal Relay
B	L	DDDDD	0 ~ 32767	Latch Relay
B	F	DDDDD	0 ~ 32767	Annunciator
B	V	DDDDD	0 ~ 32767	Edge Relay
B	B	HHHH	0 ~ efff	Link Relay
B	TC	DDDD	0 ~ 2047	Timer Coil
B	SS	DDDDD	0 ~ 25471	Retentive Timer Contact
B	SC	DDDDD	0 ~ 25471	Retentive Timer Coil
B	CS	DDDDD	0 ~ 25471	Counter Contact
B	CC	DDDDD	0 ~ 25471	Counter Coil
B	SB	HHH	0 ~ 7ff	Special Link Relay
B	S	DDDD	0 ~ 8191	Step Relay
B	DX	HHHH	0 ~ 1fff	Direct Input
B	DY	HHHH	0 ~ 1fff	Direct Output
B	TS	DDDD	0 ~ 2047	Timer Contact
B	SM	DDDD	0 ~ 2047	
B	D_Bit	DDDDDDDh	0 ~ 4212735f	
B	W_Bit	HHHHh	0 ~ 2ffff	
B	ZR_Bit	HHHHHh	0 ~ fe7fff	
B	ZR_Dec_Bit	DDDDDDDh	0 ~ 1042431f	
W	W	HHHH	0 ~ 2fff	Link Register
W	TN	DDDD	0 ~ 2047	Timer Current Value
W	SN	DDDD	0 ~ 2047	Retentive Timer Current Value
W	CN	DDDD	0 ~ 1023	Counter Current Value
W	R	FFDDDDD	0 ~ 3132767	File Register (FF:File No. 0~31) (DDDDD:0~32767)
W	SW	HHH	0 ~ 7ff	Special Link Register
W	Z	DD	0 ~ 19	Index Register
W	ZR	HHHHH	0 ~ fe7a5	File Register
W	ZR_decimal_addr	DDDDDDD	0 ~ 1042341	
W	D	DDDDDDD	0 ~ 4212735	Data Register
W	SD	DDDD	0 ~ 2047	
W	Serial_No	D	0 ~ 7	
W	Product_No	D	0 ~ 7	

Wiring Diagram:

QJ71C24 CH.2 RS422 Terminal (Diagram 1 ~ Diagram 4)

Diagram 1

cMT Series	***cMT3151***
eMT Series	***eMT3070/ eMT3105 / eMT3120 / eMT3150***
MT-iE	***MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE***
MT-XE	***MT8121XE / MT8150XE***

HMI			PLC
	COM1 RS485 4W 9P Male		QJ71C24 CH.2 RS422 Terminal
Rx-	1	⟷	SDB
Rx+	2	⟷	SDA
Tx-	3	⟷	RDB
TX+	4	⟷	RDA
GND	5	⟷	GND

Diagram 2

cMT Series	***cMT-SVR***
mTV	***mTV***

HMI			PLC
	COM2 RS485 4W 9P Female		QJ71C24 CH.2 RS422 Terminal
Rx-	7	⟷	SDB
Rx+	6	⟷	SDA
Tx-	9	⟷	RDB
TX+	8	⟷	RDA
GND	5	⟷	GND

Diagram 3

MT-iE	***MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE***
MT-XE	***MT8090XE / MT8092XE***
MT-iP	***MT6071iP / MT8071iP / MT6103iP***

HMI			PLC
	COM2 RS485 4W 9P Male		QJ71C24 CH.2 RS422 Terminal
Rx-	1	⟷	SDB
Rx+	2	⟷	SDA
Tx-	3	⟷	RDB
TX+	4	⟷	RDA
GND	5	⟷	GND

Diagram 4

MT-iE	***MT8050iE***
MT-iP	***MT6051iP***

HMI			PLC
	COM1 RS485 4W 9P Female		QJ71C24 CH.2 RS422 Terminal
Rx-	1	⟷	SDB
Rx+	2	⟷	SDA
Tx-	3	⟷	RDB
TX+	4	⟷	RDA
GND	5	⟷	GND

QJ71C24 CH.2 RS232 (Diagram 5 ~ Diagram 7)

Diagram 5

cMT Series	***cMT3151***
eMT Series	***eMT3070/ eMT3105 / eMT3120 / eMT3150***
MT-iE	***MT8073iE / MT8102iE***
MT-XE	***MT8092XE***
MT-iP	***MT6103iP***

HMI				PLC
	COM1	COM3		RS232 9P D-Sub Male
	RS232 9P Female	RS232 9P Female		
Rx	2	8	⟷	TXD-3
Tx	3	7	⟷	RXD-2
GND	5	5	⟷	GND-5
			→	DCD-1
			→	DTR-4
			→	DSR-6
			→	RTS-7
			→	CTS-8

Diagram 6

cMT Series	***cMT-SVR***
mTV	***mTV***
MT-iE	***MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE / MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE***
MT-XE	***MT8121XE / MT8150XE / MT8090XE /***

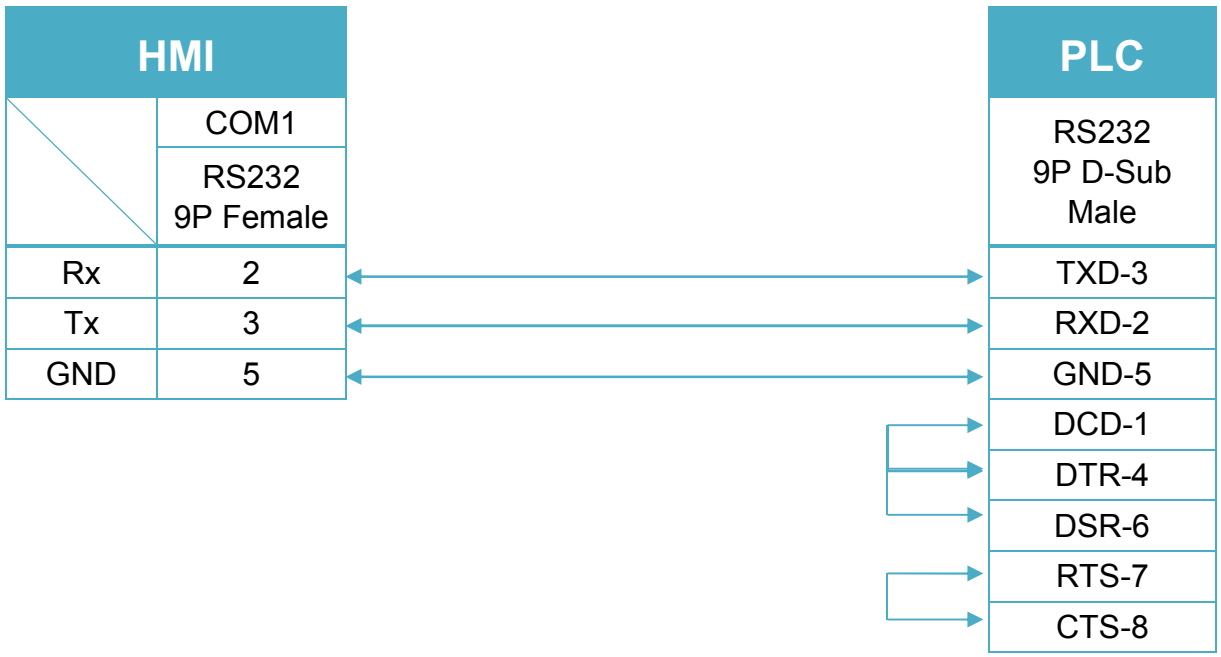
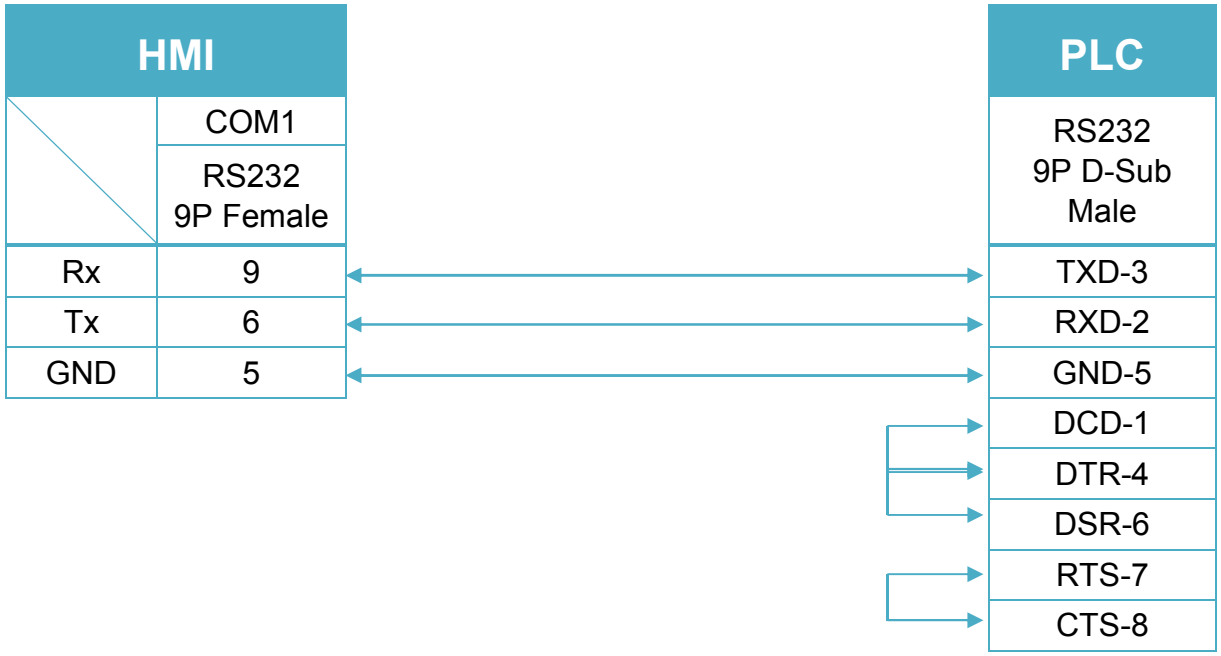


Diagram 7

MT-iE	***MT8050iE***
MT-iP	***MT6051iP / MT6071iP / MT8071iP***



6P Mini-DIN: Q00, Q01 CPU port RS232 (Diagram 8 ~ Diagram 10)

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

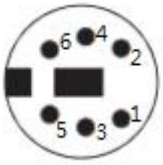


Diagram 8

cMT Series	***cMT3151***
eMT Series	***eMT3070/ eMT3105 / eMT3120 / eMT3150***
MT-iE	***MT8073iE / MT8102iE***
MT-XE	***MT8092XE***
MT-iP	***MT6103iP***

HMI				PLC
	COM1	COM3		RS232 6P Mini-Din Male
	RS232 9P Female	RS232 9P Female		
Rx	2	8	⟷	1
Tx	3	7	⟷	2
GND	5	5	⟷	4

Diagram 9

cMT Series	***cMT-SVR***
mTV	***mTV***
MT-iE	***MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE / MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE***
MT-XE	***MT8121XE / MT8150XE / MT8090XE /***

HMI		PLC
	COM1 RS232 9P Female	RS232 6P Mini-Din Male
Rx	2	1
Tx	3	2
GND	5	4

Diagram 10

MT-iE	***MT8050iE***
MT-iP	***MT6051iP / MT6071iP / MT8071iP***

HMI		PLC
	COM1 RS232 9P Female	RS232 6P Mini-Din Male
Rx	9	1
Tx	6	2
GND	5	4

6P Mini-DIN: Q00UJ CPU port RS232 (Diagram 11 ~ Diagram 13)

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

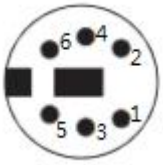


Diagram 11

cMT Series	***cMT3151***
eMT Series	***eMT3070/ eMT3105 / eMT3120 / eMT3150***
MT-iE	***MT8073iE / MT8102iE***
MT-XE	***MT8092XE***
MT-iP	***MT6103iP***

HMI				PLC
	COM1	COM3		RS232 6P Mini-DIN Male
	RS232 9P Female	RS232 9P Female		
Rx	2	8	⟷	1
Tx	3	7	⟷	2
GND	5	5	⟷	4
			→	5
			→	6

Diagram 12

cMT Series	***cMT-SVR***
mTV	***mTV***
MT-iE	***MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE / MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE***
MT-XE	***MT8121XE / MT8150XE / MT8090XE /***

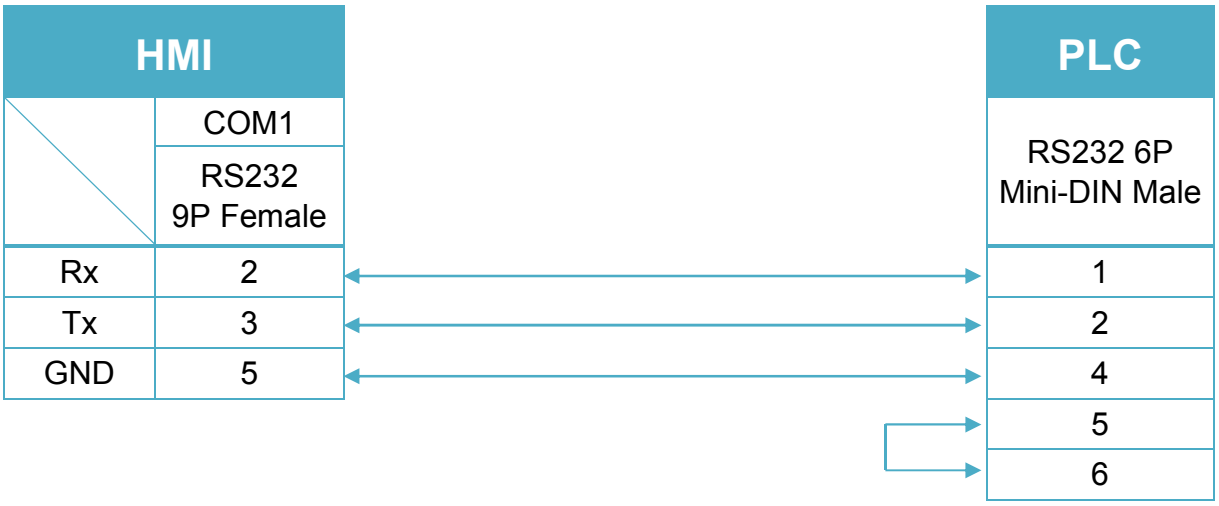


Diagram 13

MT-iE	***MT8050iE***
MT-iP	***MT6051iP / MT6071iP / MT8071iP***