

Mitsubishi iQ-R Series - Binary Mode (Symbolic

Addressing) (Ethernet)

Supported Series: Mitsubishi

R00/R01/R02/R04/R08/R16/R32/R120/R04EN/R08EN/R16EN/R32EN/R120EN/R08P/R1 6P/R32P/R120P/R08SF/R16SF/R32SF/R120SF/R08PSF/R16PSF/R32PSF/R120PSF CPU Ethernet Module, M80 CNC Controller Website: <u>http://www.mitsubishi-automation.com</u>

HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi iQ-R Series (Symbolic Addressing		
PLC I/F	Ethernet		
Port no.	4999		
Station No.	255		
Network number	0	0 ~ 999	

PLC Settings:

Communication Data Code

Binary

Navigation 🛛 🕹 🖓 🗸	h+ Global [Global Label Se	tting] 🛛 📙 weint	ek [Structure Sett	ing) 🚦	Tony [Structure S	etting] 🛛 🛃 R08CPL	I CPU Paramete	er 📓 R08CPU Module Parameter 🗙 🖡
□E- □= 🔅 All -	Setting Item List			Setting Item				
Image: Configuration	Setting Hern List	Settings		etting Ism Defs Commu Setti Netw Stati Enables Commu Openin CC-Link To Use Networ Refrest External	Item Item inications by Netwon ug Method ork No. ork No. Disable Online Char mication Data Code g Method IHF Basis Settings or Not to Use CC-L: a Configuration Settings Dervice Configuration Settings	k No .Station No. ge nk IEF Basic Setting ings	192.168.1.2 Disable Use IP Address Enable All (SLM Binary Do Not Open by Not to Use «Detailed Setting «Detailed Setting	Setting 254 (P) 2 Program
Gibbal Label Gibbal Cabel Gibbal Amelocation Gibbal Cabel Gibal Cabel Gibbal Cab	Item List Find Result			Ch	nc <u>k</u>	Restore the Default Se	ttings	×5
🖪 🔯 Device Memory		Ftoggle 🛛 😰 Update	2					
🖬 🚾 Device Initial Value		- toggle 2 Update	e Disslay	F	Data Tara			
System Parameter System Parameter Source R08CPU Source PU Parameter	bool_tag 032U32 032S32	TRUE 7533967 -30000	BIN Decimal Decimal	Format	Bit Double Word [U Double Word [S	nsigned]/Bit String [32 gned]	-bit]	
Module Parameter Memory Card Parameter Module Information Module Information Remote Password	CounterCounter CounterCounter CounterLoung CongRetentiveTimer_		 		Timer Counter Long Counter Long Retentive T	īmer		



External Device Configuration -> Added **SLMP Connection Module**, and set different port numbers to use when multiple HMIs communicate at the same time.

8				E	thernet C	onfiguration (Bu	uilt-in Ethernet I	Port)		_ 🗆 🗙
Eth	er <u>n</u> et (Config	uration <u>E</u> dit <u>V</u> iew Close	e with Disc <u>a</u> rding th	e Setting Cl	ose with <u>R</u> eflecting	the Setting			
		D	Detect Now							Module List × Ethernet Selection Find Module My F 4 •
		No.	Model Name	Communication Method	Protocol	Fixed Buffer Send/Receive Setting	PI IP Address	LC Port No.	or/D	Ethernet Device (General)
•	S S S	1 2 3	Host Station SLMP Connection Module SLMP Connection Module SLMP Connection Module	SLMP SLMP SLMP	тср тср тср		192.168.3.39 192.168.3.39 192.168.3.39 192.168.3.39	4999 4998 4997		Ethernet Device (Mitsubishi Electric GOT2000Series Servo Amplifier(MELSERVO-J4 Se Ethernet Device (COGNEX)
	S	4	SLMP Connection Module	SLMP	тср		192.168.3.39	1025		COGNEX Vision System Ethernet Device (Panasonic Indust
Ho Co nt	st Stat	tion ed Cou	Connection Connection No.1 SLMP SLMP SLMP SLMP Con SLMP Con nection Mo nection Mo dule dule	Connection Conn No.3 No SLMP SL SLMP Con SLM action Mo nection	MP Con on Mo				>	Laser Displacement Sensor
<u> </u>			<						>	
Ou	tput	-			_		_	_	-	×



Remote Password Setting:

Set a remote password and a target connection in the engineering tool, and write the data to the CPU module.

Navigation Window => [System Parameter] => [Device] => [Driver Settings] =>

[Remote Passoword Setting]

Device Settings ×					
IP Address Settings					
IP address : 192 . 168 . 1 . 111 Port no. : 4999					
Parameter Settings					
Remote Password Setting Password : 123456					
Network number(0~999) : 0					
Communication Settings					
Timeout (sec): 1.0 🔻					
Turn around delay (ms) : 0 Resending commands : 0					
-					
OK Cancel					

GX Work3 setting screen:

🙀 ProgramBody	1	FTP Server Settings			oninuncanon Data Cotte	
🚻 Fixed Scan			Remote Password	Setting		x
🊻 Event			Nemote Password	Setting		
🚻 Standby						
🏨 No Execution Type	1	Password				
🛅 Unregistered Program	i	······				
🔂 FB/FUN	No	Product	Name	Start I/O No	Module Conditions	-
🔳 🏥 Label	1	CDU Madula (Built in Ethernet Fu	(name	Start yo no.	Detail Cattion	-
💻 🏥 Global Label		CPO MODUle (Built-In Ethemet Po	viccion)		Detail Setting	
🏠 M+Global	2		×			
🔳 🔠 Structured Data Types	3		×			
📑 weintek	4		×			É
📮 etts	5		~			
📮 Tony	6		~			
🖬 🚰 Device	7		\checkmark			
🖬 📗 Device Comment	8		~			
🗉 😥 Device Memory						21
🖬 🚾 Device Initial Value	Ren	note Password Setting				
🔳 🛃 Parameter	Set 1	e nassword which authenticated	the access (connection) from ex	ternal devices.		
🧈 System Parameter						_ [
🚍 🎒 R08CPU						
🛃 CPU Parameter						
🚹 Module Parameter			Required Settings (Not Set	/ Already Set)
Memory Card Parameter						_ [
🙆 Module Information				Clear	OK Cancel	
Remote Password						
	🛨 😫 Re	etentiveTimer			Retentive Timer	





Import Tags:

1. Create data in Global Label and Structured Data Types.

Navigation 🛛 🕂 ×	🐏 M+Global [Global Label Setting] 🔀 📑 weintek [Stru	cture Setting]
□E + □= 🌣 All 🔹	<filter> Easy</filter>	Display 📧 Display Setting Check Warning) This file is system file. Please
Project	Label Name	Data Type
Module Configuration	1 bool_tag	Bit
🚍 🚰 Program	2 bool_tag_array	Bit(0127)
1 Initial	3 U16_tag	Word [Unsigned]/Bit String [16-bit]
= 🕕 Scan	4 S16_tag	Word [Signed]
	5 U32_ARRAY	Double Word [Unsigned]/Bit String [32-bit](02,02,02)
E Concernent	5 UI0_ARRAI	String(22)
	8 String64 bit	String [Unicode](32)
	9 float32	FLOAT [Single Precision]
ProgramBody	10 float64	FLOAT [Double Precision]
Hixed Scan	11 Weintek	weintek
🚻 Event	<	
🚻 Standby		
🚻 No Execution Type		Extended Display: Do Not Show Always
🛅 Unregistered Program		
📷 FB/FUN	System label is reserved to be registered.	tem label is reserved to be released. In e system label is already registered to the
🖬 🔝 Label	To execute the Reservation to Register/Release for the	system
😑 💼 Global Label	label, reflection to the system label database is required	i.
🕋 M+Global	Please execute 'Reflect to System Label Database'.	Reservation
The structured Data Types	assigned device is changed in system label Ver 2	
a weintek	* Only iQ-R series/GOT 2000 series is available for syst	em label Ver.2.
etts	* To execute Online Program Change, execute Online	Program
	Change and save.	
E M Device		
	Watch 1[Watching]	
	H ON H OFF H ON/OFF toggle 💈 Update	
I Contraction of the second se	Name Current Value	Display Format Data Type Foolish

2. **Global Label -> Access from External Device** setting must be checked to be able to communicate with PLC.

Navigation 4 ×	M+Glo	obal [Global Label Setting] 🗙 🚦	weintek [Struct	ture Setting	1	Fony [Structure S	etting]					◄ ♦ ٩
P∰+ P⊂ ✿ All →	<fiter></fiter>		Easy D	isplay K	Digp	alay Setting	Check War	ming) This file is system t	file. Please do not edit			
Project		Class	Assian	Initial	Constant	English(Display	Bemark	System Label Relation	System Label Name	Attribute	Access from External Device	
Module Configuration	1	VAR_GLOBAL -	1				1		1		v	
E S Program	2	VAR_GLOBAL										
Initial	3	VAR_GLOBAL -	D0									
= di Scan	4	VAR_GLOBAL -									v	
	5	VAR_GLOBAL -									<u> </u>	
	6	VAR_GLOBAL									<u> </u>	
E M ProgPou	7	WAR_GLOBAL -									×	
Local Label	8	VAR GLOBAL										
ProgramBody	10	VAR GLOBAL									~	
Fixed Scan	11	VAR GLOBAL	Detailed Setting									
🏥 Event		hur or one					1					× ×
🚮 Standby	۲.											· · ·
1 No Execution Type						E-4	andad Display:	Do Not Show Always				
Unregistered Program							ended bispidy.	. Do Not Show Penays				
📅 FB/FUN	Syster	m label is reserved to be registere	d. 🗌 Syste	em label is r	eserved to	be released.	The syst	tem label is already regist	ered to the system lab	el database.		
🔳 🌆 Label	To execu	ute the Reservation to Register/Re	elease for the sv	/stem				Pe	concrition to Ponister 9	vetern Label		
🔳 🏥 Global Label	label, ref	flection to the system label datab	ase is required.					TVC	servation to register a	ystern Laber		Reflect to
🐑 M+Global	Please e	xecute 'Reflect to System Label D	atabase'.					Re	servation to Release S	ystem Label		System Label
🖃 🛤 Structured Data Types	assigned	device is changed in system lab	e project wrien el Ver 2									Database
B weintek	* Only it	Q-R series/GOT 2000 series is ava	ailable for system	m label Ver.	2.				Import System L	abel	Not Defended to a	
etts	* To exe	ecute Online Program Change, ex	ecute Online Pr	rogram							Total: 0	
Tony	Change	and save.										
E Constant	Watch 1	[Watching]										ά×



3. Global Label and Structured Data Types export label files separately.



4. After adding a driver in EasyBuilder Pro, click [Tag Manager].

System Parameter Settings									
Cellular Dat	a Network	802.1	X (WiFi)	WiFi Hots	pot	Time S	Sync./DST	e-Mail	FTP
Device	Model	Gene	eral	System	Remote	e	Security	Extende	ed Memory
Device list:								X	Vhaťs my IP?
	Name	Location	Device Ty	ре	Interface	VF P	iotocol Sta	tion No.	
⊿ Local H Lo•	MI Local HMI Mitsubi…	Local Local	cMT31082 Mitsubishi	CH (1280 x 800) . iQ-R Series…	- Ethemet…	- TCP/	0 P 255		
New	HM	Ne	w Device/So	ervei	I	Delete		Setting	5
	Tog	Monogor							
	Iag	manager							

5. Import Global Label. (single file)

Name	Data Type	Comment	^
532532	DINT		
TIMETIME	TIME		
PointerPointer	POINTER		
TimerTimer	TIMER		
CounterCounter	COUNTER		
LongCounterLoungCoun	LCOUNTER		
RetentiveTimer_	RETENTIVETIMER		
ongRetentiveTimer	LRETENTIVETI		
LongTimer_	LTIMER		
J16_ARRAY_1024	WORD[1024]		
FLOAT_ARRAY_512	REAL[512]		
J32_ARRAY_1024	DWORD[1024]		
516_ARRAY_333	WORD[3,3,3]		
532_ARRAY_333	DINT[3,3,3]		
Structure_Test	Tony		
StrucureArraryTest	Tony[10]		
Float64_Array	LREAL[32]		
Float64_Marray	LREAL[3,3,3]		~

6. Import Structure Data Type tags (import multiple files at the same time)

Label Data Type	
Name	Data Type
 Name COUNTER LCOUNTER LCOUNTER LRETENTIVETIMER RETENTIVETIMER RETENTIVETIMER TIMER 	Lata iype
Import	Delete OK Cancel

Support Device Type:

Data type	EasyBuilder data format	Memo
Bit	bit	
Word [Unsigned]	16-bit BCD, Hex, Binary, Unsigned	16-bit
Word [Signed]	16-bit BCD, Hex, Binary, Signed	16-bit
Double Word [Unsigned]	32-bit BCD, Hex, Binary, Unsigned	32-bit
Double Word [Signed]	32-bit BCD, Hex, Binary, Signed	32-bit
Float [Single Precision]	32-bit Float	32-bit
Float [Double Precision]	64-bit Double	64-bit
String (32)		*Note1
Timer		
Counter		
Long Counter		
Retintive Timer		
Long Retentive Timer		
Long Timer		

*Note1: String (32) arrays are not supported.

*Note2: Tag name length cannot exceed 30 characters.

*Note3: String[Unicode)(32), Time and Pointer are not supported

Wiring Diagram:

Ethernet cable:

