

LV5V-8BYT BD Module Manual V1.0



PLC LV5V-8BYT BD Module Manual V1.0

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1 Naming rules

LX5V-8BYT - BD								
Model	Numbers of channel	Module type	I/O type	Output type	Product model			
LX5V	8 channels	В	Y: Output	R: Relay	BD board			
			X: Input	T: Transistor				

2 Appearance and terminal

		Terminal description
	OUT0	Output point 1
LX5V-8BYT-BD	OUT1	Output point 2
	OUT2	Output point 3
	OUT3	Output point 4
	COM	Output common terminal
OUT1 OUT5	OUT4	Output point 5
OUT2 OUT6	OUT5	Output point 6
0013 0017	OUT6	Output point 7
COM COM	OUT7	Output point 8
01234567	COM	Output common terminal

Note: Hot swapping is not supported by BD module! Please power on the PLC host after the BD module is installed.

- Weight: about 0.03 kg.
- **LED indicator:** 0 to 7 indicates channel OUT0 to OUT7. The light is on when there is output, and the light is off when there is no output.
- Installation position: It can only be installed in BD1 card slot of PLC host.



3 Output specification

Project		Transistor output					
	Model	LX5V-8BYT-BD					
Output circuit composition		Image: Complex supply 24V DC					
Extern	al power supply	DC 5~30V					
Circ	cuit insulation	Digital capacitor isolation insulation					
Ad	ction display	When the channel has output, the LED light corresponding to the channel will be on.					
	Resistance load	0.3 A/1 point; 1.2 A/4 points					
Iviaximum	Inductive load	7.2W/DC24V					
loau	Lamp load	0.9 W/DC24V					
Open circ	cuit leakage current	0.1 mA/DC30V					
M	inimum load	DC5V 2mA reference value					
Response	$OFF \rightarrow ON$	Below 0.2 ms					
time	$ON \rightarrow OFF$	Below 0.2 ms					

4 PLC device description

BD module	PLC type	Instructions for use
	1 22/1	D8112: The lower eight bits are set to 1 or 0 to control the output
	LASV	OUT0 to OUT7.
	LX5V	When the PLC firmware version is 2.050 and below, the usage is as
		follows:
		SD2010: The lower eight bits are set to 1 or 0 to control the output
		OUT0 to OUT7.
		When the PLC firmware version is 2.051 and above, the usage is as
		follows:
		I/O mapping: OUT0 to OUT7 fixed mapping to Y1000 to Y1007.
		Response time: 0.1 to 3276.7 ms. (Response time: the interval time
		for PLC to write data to BD module)
		BD monitoring function. (See buffer memory description for details)

5 Instructions for use

5.1Used on LX5V series host

Parameter configuration

(1) Open the host computer software and create a new project, double-click "Project Manager" \rightarrow "Extended Function" \rightarrow "BD Module Configuration" Note to enter "BD settings" interface;

2 Select "LX5V-8BYT" in the device bar on the right side of the BD module configuration interface and double-click to add it to the corresponding slot position of PLC (slot 1 or 2, the software will select slot 1 by default. You could right-click it to move to slot 2);

3 After adding BD module to the machine slot, double-click or right-click to select configuration parameters to enter LX5V-8BYT-BD configuration parameters interface, as shown in the following figure.

0-1-0-1									
	4) (> *			Wecon Pl	C Editor2 - Extended Fun	ction BD Board Configu	uration		- 8
File PLC(P) V	/iew Help								^ Sty
R PLC model change	Paste - Undo		Comment edit	Compile	Edit model	Transfer Settings		Device Monitor OPLC clock setting Module monitoring Clear Device Memory	Automatic backup
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Note: This function is only supported in the following host computer and slave computer versions:

Supported host computer versions: Wecon PLC Editor 2 2.1.204 and above, as shown in the following figure:

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Project manag 👻 🗜 🗙	Sca	nning MAIN 🦯	Extended Function BD Board Configur	ration ×
E- C Program	Slot	Configure d	Device description	Device occupation
E G Scanning	0	LX5V-N-3624 LX5V-ETH	LX5V-N-3624 Ethernet communication module	X0~X43;Y0~Y27 R0~R19;S0~S19;R20~R
Subroutine Therrupt Device Comment Parameter Device memory Extended Function Electronic CAM FLCLINK Ethernet SD Board Confi		About V	Vecon PLC Editor2 Wecon PLC Editor2 Release Date:2022/8/29 (C)2016 Furhou Fuchang Wecon : Technology Co., Ltd.	×
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oboard	Ladder Symbol	Edit	Program	Program Mode		Online		
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evice								
Derice nome					Monitoring starts Set C	urrent Value		_
Communication setting:	5			× (Device Info			~
• USB Connection(Best to use well-shield	ed cable)			Parameter	Value		
USB port	USB(9)HUB(5)		Commu	nication test	Device version info PLC model	preation		•
					Software version numbe	er V2.091		
OEthernet config	guration		-		Hardware version numbe	er V2.001		
				OK	Product Unique ID	D81A6273B	CF45844495F4A276FFB0ED	IC
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NIC selection	TAP-Windows Adapter V9	*			BD board configurat	tion information		
				2	BD1 actual installation	on type LX5V-ETH		
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					Input points	24		
					Output points	16		
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Dergited 2								-

The parameter configuration interface is as follows:

Set the response time. (The response time is the interval between PLC acquisition of BD module data. Range: 0.1 ms to 3276.7 ms).

Module configuration	I/O mapping D	levice In 1		
Response time (O.1ms)	10	1~3276	7	

I/O mapping: OUT0~OUT7 fixed mapping to Y1000~Y1007, click OK to complete the configuration.

Chappel mapping element	Channel	
chanter mapping erement	Challer	
– ¥1000	ουτο	
— ¥1001	OVT1	
— ¥1002	OVT2	
— ¥1003	OUT3	
- ¥1004	OUT4	
- ¥1005	OVT5	
— ¥1006	OVT6	
- ¥1007	OUT 7	



After the BD module configuration is downloaded to PLC, it will take effect after STOP \rightarrow RUN.

	• Wri	te(W)	0	Verify(C)
Param+Program(P)	Select All(A)		Deselect all(N)
Modu] LX5CPU/LX5V-N] PLC data	le Name/Data Name	Detail	Upload pr	Memory capacity Program capacity 0 /384KB
Program (ir Parameter PLC par Device Com	icluding program parameters + hig ameter iment ENT	h-s		Program steps 0 /120000 Comment siza 0 /128KB Calculated size
Hi de	Execute(E) 0/0		top	Close
turne from				

Ladder editing

0 SM100 Always ON aft er RUN SM113	{MOV K2Y2	0 SD2010 BD1 chan nel 1 Y20
9 1s Oscillatio n clock		(

Description:

Combine Y20~Y27 into bytes and map to SD2010. When Y23 is turned on, LED3 is on and OUT3 is turned on.



5.2 Used on LX3V series host



Description:

Combine Y20~Y27 into bytes, and map to D8112. When Y20 is turned on, LED0 is on and OUT0 is turned on; When Y23 is turned on, LED3 is on and OUT3 is turned on.

5.3 BD Monitoring Interface and buffer memory

Open the module monitoring interface, select the BD module, select the online mode, and select LX5V-8BYT in the BD module list on the right side to monitor the BD module online.

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- Program	Module type OExpans ③ BD b	oa Operating mode	; O 0nline	⊙ Offline	Current	module info.: LX5V-8BYT	R	efresh	Customize
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Buffer memory (BFM)

BFM address	Power off hold	Read/ write	Memory name	Default	Range	Description
0x2080	×	R	Channel value	0	0 to 0xFF	Display channel output status
0x2082	×	R	Status information	0	-	-
0x2084	×	R	Error code	0	-	-
0x200	×	R	Current maximum package length	0	0 to 0xFFFF	The maximum length of the currently sent package
0x202	×	R	Number of retransmissions	0	0 to 0xFFFF	Number of retransmissions
0x204	×	R	Number of retransmissions of subpackages	0	0 to 0xFFFF	Number of retransmissions of subpackages
0x206	×	R	Received times of sync frame	0	0 to 0xFFFF	Received times of sync frame
0x208	×	R	Sent times of sync frame	0	0 to 0xFFFF	Sent times of sync frame
0x20A	×	R	Sent times of SDO	0	0 to 0xFFFF	Sent times of SDO
0x20C	×	R	Received times of SDO	0	0 to 0xFFFF	Received times of SDO
0x20E	×	R	Sent times of PDO	0	0 to 0xFFFF	Sent times of PDO
0x210	×	R	Received times of PDO	0	0 to 0xFFFF	Received times of PDO
0x212	v	R/W	Latest error code	0	Only 0 can be written.	Protocol internal error code, used for developing positioning problem.
0x214	×	R	Number of bytes sent	0	0 to 0xFFFFFFF	Number of bytes sent
0x218	×	R	Number of valid bytes sent	0	0 to 0xFFFFFFF	Number of valid bytes sent
0x21C	×	R	Number of bytes received	0	0 to 0xFFFFFFF	Number of bytes received
0x220	×	R	Number of valid bytes received	0	0 to 0xFFFFFFF	Number of valid bytes received
0x224	×	R	Communication time (unit s)	0	0 to 0xFFFFFFF	Time from power-on to current normal communication