

Connecting EZMarquee with SLC 500 Series'

This guide will walk you through the setup of communicating to the SLC 500 controllers. It will show you how to setup the slave EZMarquee and program the SLC 500 to send message to the slave EZMarquee.

Setup of EZMarquee

The only setup needed on the EZMarquee side is to connect the RS232 cable to backside EZMarquee. Also the EZMarquee should be powered up and the Baud Rate recorded for use in the SLC 500 setup.

Setup of SLC 500

To connect the EZMarque to the SLC 500 an RS232 cable is used. Also the PLC needs to be setup to send an ASCII string to the slave EZMarquee. To do so follow the direction below:

- 1. Open the RSLogix 500 software and in a project go to the ladder logic screen.
- 2. Select the communication channel needs to be configured. Please go to Channel Configuration and enter its menu.



3. In the Channel Configuration menu General tab make sure that Channel 0 Mode is User. Then go to the Chan. 0 – User tab.

nannel Configuration	23
General Chan. 1 - System Chan. 0 - System Chan. 0 - User Channel 1 Driver: Ethermet Write Protected	
Edit Resource/Owner Timeout (x1 sec) 60 Diagnostic File 0	
Channel 0 System Driver: [DFI Full Duplex Mode: User view of Mode Change Enabled Write Protected Edt Resource/Owner Timeout (x 1sec) 60 Diagnostic File 0	
OK Cancel Apply	Help



4. In this menu configure the Baud Rate to match the EZMarquee Baud Rate and also make sure to select the ASCII driver. Note: BAUD RATE CAN ONLY BE CHANGED OFFLINE AND THEN MUST BE DOWNLOADED TO THE PLC.

Channel Configur	ation		23
General Chan.	1 - System Chan. 0 - Sy	vstem Chan. 0 - User	1
Driver AS Baud 38 Parity NC Stop Bits	CII		
Data Bits	8 🔻	Temination Characters	_
		Termination 1 \d Append 1 \d	
		Termination 2 \/ff Append 2 \/a	
Protocol Cont Control Line	No Handshaking	_	
Delete Mode	Ignore		
	Echo	_	
	C XON/XOFF		
		OK Canad Apply Hal	
		Cancer Apply Hel	

- 5. Now to store messages that will be sent create a new Data File which will be string type. So on the Data Files right click and select new.
- 6. Then in the Create Data File select the String for Type and create a new data file.

Tupo	Pinaru			
rype:	binary	<u> </u>		
Name:				
Desc:				
Elements:	1 La	st:		
Debug Skip When	Deleting Unused N	/lemory		
Skip Wher	Deleting Unused M	demory .		
Debug Skip Wher Scope Global	Deleting Unused N	4emory		
Debug Skip Wher Cope Global Local	To File: 2 -	4emory		
Debug Skip Wher Coope Global Local Protection	To File: 2	4emory	Ţ	

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7. In this string data type all messages that will be sent to the EZMarquee will be stored. Double click on the ST(file number) and then input the messages in the format \command.

闣 Data Fil	e ST9						
Offset	LEN	String Text	(Symbol)	Description			
ST9:0	11	\^E1\^L1Hell	0				
ST9:1	0						
ST9:2	0						
ST9:3	0						
ST9:4	0						
ST9:5	0						
ST9:6	0						
ST9:7	0						
ST9:8	0						
ST9:9	0						
•							
51	9:5					Rad	ix:
Symbol:							Columns: 2 💌
Desc:							
ST9 ·		Ē	Properties		<u>U</u> sage	Help	

- 8. To find how the commands should look you can use the EZMarquee software and generate the correct message string commands. Example messages:
 - a. ^E1^L1Hello
 - i. Result: Clears display, shows 4" message, message: Hello
 - b. ^E1^L0^C1^D1^K0^dC test^N^Y1
 - i. Result: Clears display, scrolls 2" message repeatedly, message: test

🔀 Data	File ST9		
Offset	: LEN	String Text (Symbol) Description	
ST9:0	28	\^E1\^L0\^C1\^D1\^K0\^dC test\^N\^Y1	
ST9:1	0)	
ST9:2	0)	
ST9:3	0		
ST9:4	0)	
ST9:5	0)	
ST9:6	0		
ST9:7	0		
ST9:8	0		
ST9:9	0		
•			→ -
	ST97	Badix	-
Symbol:		Col	umns: 2 💌
Desc:			
ST9	-	Properties Usage Help	

9. The $\$ is needed in between all ASCII commands that the EZMarquee is to execute due to how RSLogix 500 sends the ASCII commands (all normally $^{>} = ^{$ in RSLogix 500).



10. Finally the command that actually sends the message is added to the ladder logic. It is the AWT command with the Source being the String data file. You also need to use a control bit from R6. Finally the String Length is the maximum characters sent and the Characters Sent is the amount of characters that actually were sent.

