



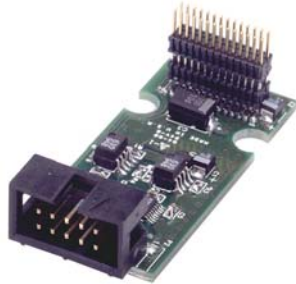
INTELLIGENT MOTION SYSTEMS, INC.

Excellence in Motion™

MicroLYNX EXPANSION MODULE

ISOLATED COMMUNICATIONS MODULES FOR CAN VERSION MICROLYNX ONLY

QUICK REFERENCE






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Isolated Communications Quick Reference Guide

The primary function of this guide is to acquaint the user with the specifications and configuration of the CAN Version MicroLYNX Isolated Communications Modules. The full MicroLYNX product manual is available in Acrobat PDF format on the IMS Product CD. It also may be downloaded from the IMS web site at www.imshome.com.

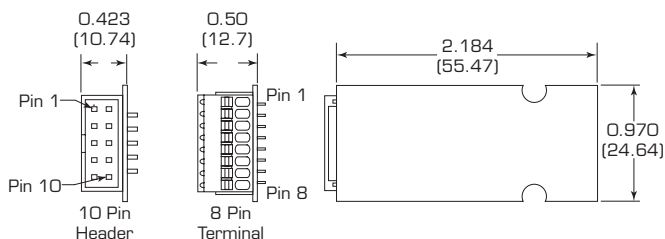
Notes And Warnings

Please observe the following when handling, connecting and using your MicroLYNX Expansion Modules. Failure to observe these points may result in damage. All warranty and disclaimer information is located in the full product manual and should be referenced for more information.

-  The MicroLYNX Expansion Module components are sensitive to Electrostatic Discharge (ESD). All handling should be done at an ESD protected workstation.
-  Hazardous Voltage Levels may be present if using an open frame power supply to power the MicroLYNX Controller and Modules.
-  Do not connect or disconnect the AC power or the motor leads with the AC power on.

Mechanical Specifications

Dimensions in Inches (mm)



NOTE: The 8 Pin Terminal Block is supplied with the mating connector. The 10 Pin Header is NOT SUPPLIED with a mating connector. (Use AMP 3-1437026-4 or equivalent).

Thermal Specifications

	Range
Operating Temperature	0 to +50°C
Storage Temperature	-20 to +70°C
Humidity	0 to 90% non-condensing

Electrical Specifications

RS-232 Receiver	
Input Voltage Range	±30 Volts
Input Threshold Low	0.4 Volts
Input Threshold High	2.4 Volts
Input Resistance	3 to 7 kΩ
RS-232 Transmitter	
Output Voltage Swing	±5 Volts
Output Resistance	300 Ω
Output Short Circuit Duration	Continuous
RS-485 Receiver	
Input Voltage Range	-8 to +12.5 Volts
Input Differential Threshold	±200 Millivolts
Input Resistance	96 kΩ
Driver	
Differential Output (R=50 Ω)	2 Volts
Output Voltage Range	-8 to +12.5 Volts

MicroLYNX Slot Usage

The Isolated Communications Expansion Modules may only be used in Slot 2 of the CAN Version MicroLYNX.

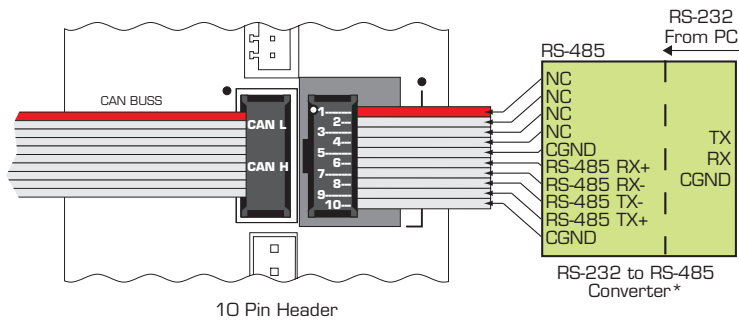
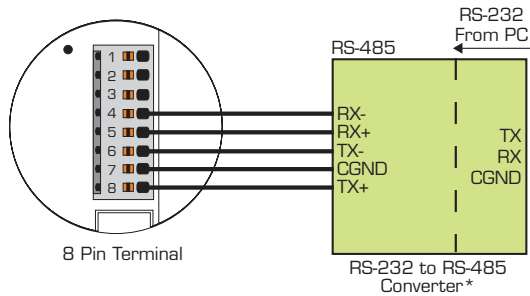
The RS-232 and RS-485 Expansion Modules CANNOT be used together.

MicroLYNX Expansion Slot Usage				
Expansion Module	Slot 1	Slot 2	Slot 3	Maximum Allowed
Isolated Digital I/O	Yes	Yes	Yes	3
High Speed Differential I/O	No	Yes	Yes	2
Analog Input/Joystick	Yes	Yes	Yes	1
Isolated Communication	No	Yes	No	1
Analog Output	Yes	Yes	Yes	2
12 Channel I/O	Yes	Yes	No	1

N Both the RS-232 and the RS-485 Expansion Modules utilize the MicroLYNX COMM 2 port. Therefore, the two Modules CANNOT be used in conjunction with each other. Only one of the two interfaces can be used with the CAN Version MicroLYNX at any given time.

RS-485 Module Pin Assignments

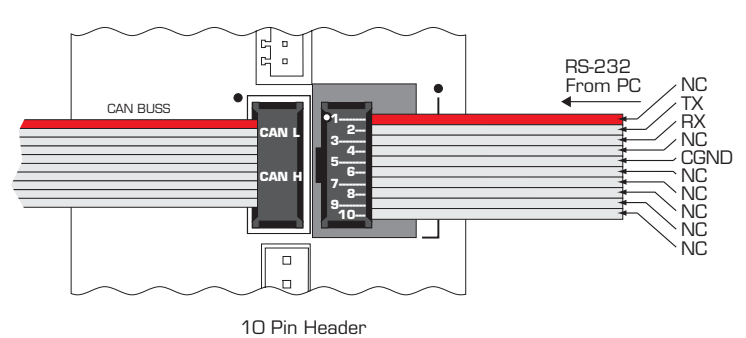
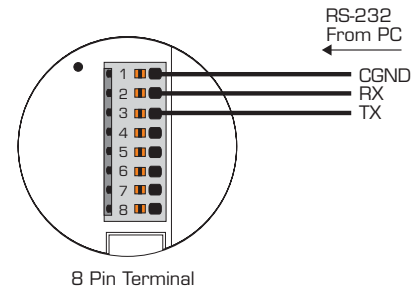
Pin #	RS-485 Connector Option	
	8 Pin Terminal Block	10 Pin Header
1	NC	NC
2	NC	NC
3	NC	NC
4	RX -	NC
5	RX +	Comm Ground
6	TX -	RX +
7	Comm Ground	RX -
8	TX +	TX -
9		TX +
10		Comm Ground



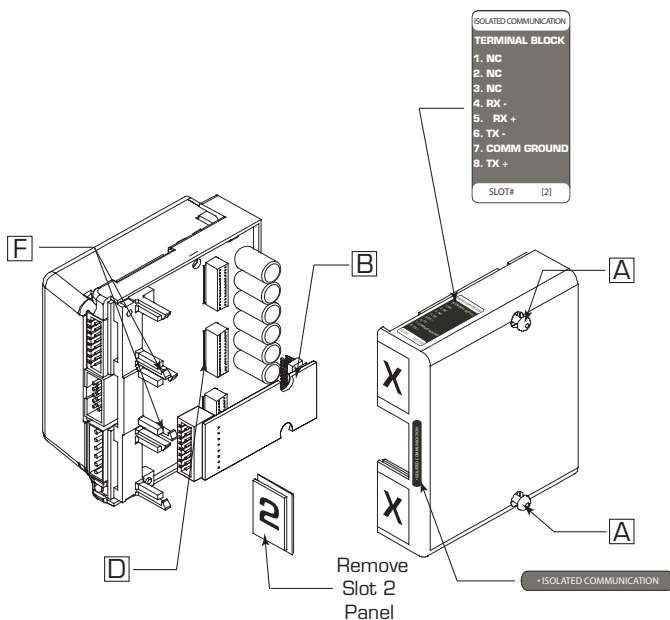
* The recommended RS-232 to RS-485 Converter is IMS Part Number CV-3222.
If your PC is equipped with an RS-485 board, no converter is necessary. Connect the RS-485 lines from the host PC directly to the MicroLYNX.

RS-232 Module Pin Assignments

Pin #	RS-232 Connector Option	
	8 Pin Terminal Block	10 Pin Header
1	Comm Ground	NC
2	RX	TX
3	TX	RX
4	NC	NC
5	NC	Comm Ground
6	NC	NC
7	NC	NC
8	NC	NC
9		NC
10		NC



Installing the Isolated Communications Module



To Install the Module:

- 1) Remove the two retaining screws (A) from the cover.
- 2) Remove the blank panel from the #2 slot
- 3) Carefully press the Expansion Module (B) into place by plugging the 28 pin connector into the #2 receptacle and snapping it into place under the retaining clips (F).
- 4) Reinstall the MicroLYNX cover.
- 5) Affix the labels supplied with the Module as shown.

For More Information:
See the complete LYNX Product Family Operating Manual on the IMS Product CD or at www.imshome.com