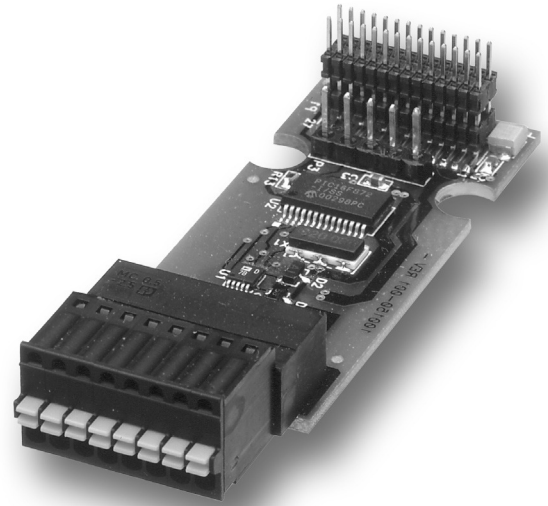


MICRO LYNX™ EXPANSION MODULE

ANALOG OUTPUT MODULE



FEATURES

- Low Cost
- Two 0 to +5 VDC Output Channels (Up to 4 total channels if two boards are used)
- 12 Bit Resolution
- Three Modes of Operation: Voltage, Velocity and Position
- Adds the Capability for Controlling:
 - AC Variable Frequency Drives
 - Servo Drives
 - Brush-Type DC Drives
- Plugs Directly into MicroLYNX Controller
- Removable Terminal Strip or Pin Header

DESCRIPTION

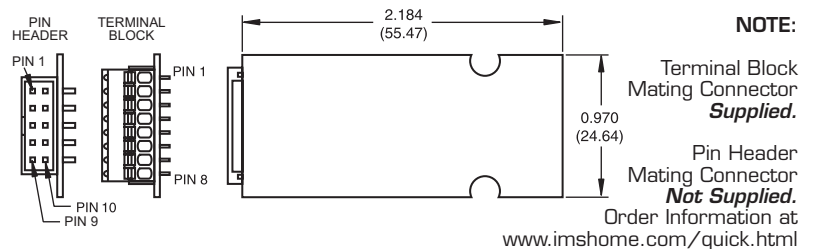
The Analog Output Module gives the MicroLYNX the ability to control drives that require an analog control signal such as variable frequency drives, servos and brush-type DC motor drives. It adds two 0 to +5 volt output channels to the functionality of the MicroLYNX. Each channel features 12 bit resolution and may be programmed to one of three operational modes: voltage, velocity or position. Each of these modes may be set to a 2.5V centerpoint for plus or minus operation.

In many cases, this module may save the expense and complexity of using a PLC by enabling MicroLYNX to handle applications such as Indexing Conveyor, Material Handling and Feed Rate Override.

ELECTRICAL SPECIFICATIONS

Analog Output Voltage Range..... 0 to +5 volts @ 50mA Max.
 Resolution 12 bits
 Offset..... ±3 LSB
 Integral Linearity Error..... ±2 LSB
 Differential Linearity Error ±3/4 LSB

INTERFACE INFORMATION



PIN ASSIGNMENTS

PIN	CONNECTOR OPTION	
	TERMINAL BLOCK	PIN HEADER
1	GROUND	GROUND
2	CH1(slots1-2),CH3(slot3)	GROUND
3	GROUND	CH1(slots1-2),CH3(slot3)
4	GROUND	GROUND
5	CH2(slots1-2),CH4(slot3)	GROUND
6	GROUND	CH2(slots1-2),CH4(slot3)
7	NO CONNECT	NO CONNECT
8	NO CONNECT	GROUND
9		NO CONNECT
10		NO CONNECT

ENVIRONMENTAL SPECIFICATIONS

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

ORDER INFORMATION

	TERMINAL BLOCK	PIN HEADER
PART NUMBER	<i>MX-DA100-000</i>	<i>MX-DA200-000</i>

Standard product shown in bold italics. Lead times may apply to other versions.



INTELLIGENT MOTION SYSTEMS, INC.

Excellence in Motion™

MicroLYNX EXPANSION MODULE

ANALOG OUTPUT MODULE

QUICK REFERENCE




370 N. MAIN ST., PO BOX 457, MARLBOROUGH, CT 06447
PH: (860) 295-6102, FAX: (860) 295-6107
Internet: www.imshome.com, E-Mail: info@imshome.com


Analog Output Quick Reference Guide


The primary function of this guide is to acquaint the user with the specifications and configuration of the MicroLYNX Analog Output Module. 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.

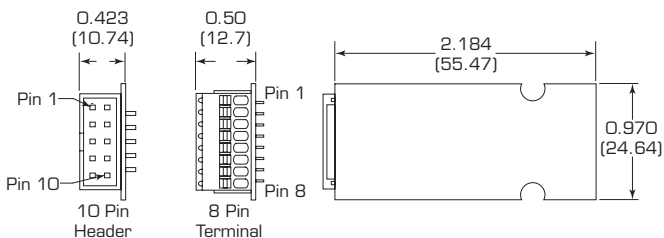
 The MicroLYNX Expansion Module components are sensitive to Electrostatic Discharge (ESD). All handling should be done at an ESD protected workstation.

 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

Analog Output Voltage	0 to +5 Volts @ 50mA Max.
Resolution	12 bits
Offset	±3 LSB
Integral Linearity Error	±2 LSB
Differential Linearity Error	±3/4 LSB

Pin Assignments

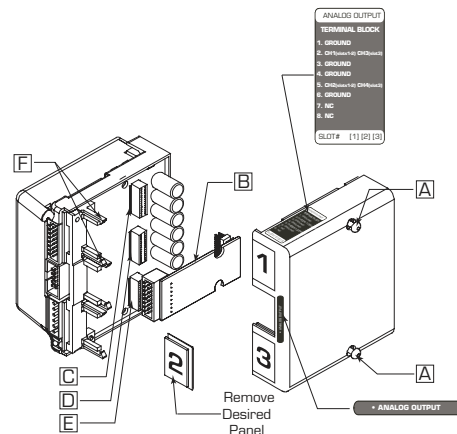
Pin #	Connector Option	
	8 Pin Terminal Block	10 Pin Header
1	Ground	Ground
2	CH1 (slots 1-2), CH3 (slot 3)	Ground
3	Ground	CH1 (slots 1-2), CH3 (slot 3)
4	Ground	Ground
5	CH2 (slots 1-2), CH4 (slot 3)	Ground
6	Ground	CH2 (slots 1-2), CH4 (slot 3)
7	NC	NC
8	NC	Ground
9		NC
10		NC

MicroLYNX Slot Usage

The Analog Output Expansion Module may be used in any expansion slot in the MicroLYNX, with a maximum of two Modules per MicroLYNX.

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*

Installing the Analog Output Module



To Install the Module:

- 1) Remove the two retaining screws (A) from the cover.
- 2) Remove the blank panel (1, 2, or 3) from the desired slot you want to use.
- 3) Carefully press the Expansion Module (B) into place by plugging the 28 pin connector into the desired receptacle (C, D, or E) 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