

# NetLinx® NX Integrated Controller

NX-1200 (FG2106-01)



## Overview

The NX-1200 / NetLinx® NX Integrated Controller is a programmable network appliance specifically designed to control AV and building technology using multiple analog and digital formats. The NX-1200 provides a scalable platform for the future by combining high performance, backward compatibility and extensive network security features. The NX-1200 is designed to control and automate a variety of devices in single rooms or multiple small rooms and is capable of supporting devices with a variety of communication formats.

### Common Applications

- NX Master Security firmware is ideal for enterprise, education, and government policies requiring secure communication over a computer network in line with security standards expected by the IT industry of any equipment running on an enterprise.
- The NX-1200 is perfect for small classrooms, huddle spaces, small conference rooms, learning spaces and multi-zone systems with a small number of wired devices.
- The NX-1200 is designed to provide secure control and monitoring for a small AV system, HVAC, lights, security, power management, and many similar specialized applications requiring a space-saving physical control device with versatile mounting.

### Features

- **IPv6** – Supports Internet Protocol version 6 (IPv6), the communications protocol that provides an identification and location system for computers on networks and routes traffic across the Internet
- **IEEE 802.1X** – Supports IEEE Standard for Port-based Network Access Control with the ability to grant or deny network access to devices wishing to attach to a LAN based on credentials tied to the device rather than to a user
- **X.509 Certificate Services** – NX supports customer-provided certificates for access to protected networks.
- **Full LDAP Integration** – Supports multiple user-defined login groups for accessing the master, as well as provides an AMX programmer the capability to require network login to access certain areas of the touch panel
- **High Performance Architecture, Flexible Programming Platform (RPM, NetLinx and Java)** – Easily scalable to support a wide range of applications for today and tomorrow

- **Full Line Compatible (Backwards and Cross-Compatibility)** – Standardized port numbers and new configuration import/export tools mean fewer coding changes
- **TLS / SSH Client** – Provides NetLinx programmers the ability to manage secure port TLS and SSH communications with a remote device or server
- **Cryptographic Support** – In accordance with FIPS 140-2, a U.S. government computer security standard used to accredit cryptographic modules for the protection of sensitive or valuable data
- **Network Syslog** – The Central Controller generates an audit record of events using syslog, a standard for message logging
- **Enhanced Diagnostics On Serial and IR Ports** – Provides real time error feedback when Serial and IR ports are disconnected or improperly wired
- **File Import / Export From USB Drive** – Backup and restore configuration data, program files, and update firmware from a standard USB flash drive
- **Hardware / Software Built for 24/7/365 Operation** – Provides outstanding reliability and improved diagnostic

**Additional Features**

- **Ultra-Fast 1600 MIPS processor**
- **512 MB Onboard RAM**
- **1 M Non-Volatile Memory**
- **4 GB SDHC FLASH Memory**
- **1 RU x 1/3 Rack Space**
- **1 AXLink Interface**
- **1 10/100 LAN Interface**
- **4 Digital I/O Ports**
- **1 RS232/422/485 Port**
- **1 RS232-Only Port**
- **2 IR/Serial Output Ports**
- **1 IR Receive Port**

**Specifications**

GENERAL	
Enclosure	Metal with black matte finish
Dimensions (HWD)	1 11/16" x 5 13/16" x 5 1/8" (42.16 mm x 147.32 mm x 130.81 mm)
Weight	1.6 lb. (.726 Kg)
Regulatory Compliance	<ul style="list-style-type: none"> <li>• FCC CFR Title 47 Part 15</li> <li>• CE EN 55022</li> <li>• CE EN 55024</li> <li>• CE EN 60950-1</li> <li>• IEC 60950-1</li> <li>• UL 60950-1</li> <li>• C-Tick CISPR 22</li> <li>• IC CISPR 22</li> <li>• VCCI CISPR 22</li> <li>• RoHS</li> <li>• WEEE</li> </ul>
Included Accessories	<ul style="list-style-type: none"> <li>• 2-pin 3.5 mm mini-Phoenix (female) PWR connector (41-0002-SA)</li> <li>• 4-pin 3.5 mm mini-Phoenix (female) AxLink connector (41-5047)</li> <li>• 10-pin 3.5mm mini-Phoenix female RS232/422/485 connectors (41-5107)</li> <li>• 5-pin 3.5mm mini-Phoenix female RS232 connectors (41-0336)</li> </ul>

	<ul style="list-style-type: none"> <li>• 6-pin 3.5 mm mini-Phoenix female I/O connector (41-5063)</li> <li>• (2) CC-NIRC IR Emitters</li> </ul>
Optional Accessories	<ul style="list-style-type: none"> <li>• AVB-VSTYLE-RMK, V Style Module Rack Mounting Tray 1/4" Depth (FG1010-720)</li> <li>• AVB-VSTYLE-SURFACE-MNT, V Style Single Module Surface Mount Brackets (FG1010-722)</li> <li>• PSN6.5, 6.5 A Power Supply (FG423-41)</li> <li>• PSR5.4, 12 VDC, 5.4 A Power Supply with 3.5 mm Phoenix Connector with Retention Screws (FG423-48)</li> <li>• PSN4.4, Power Supply, 4.5 A, 3.5 mm Phoenix, 13.5 VDC (Discontinued) (FG423-45)</li> <li>• CC-USB-NI, USB Programming Cable (FG10-2105)</li> <li>• CC-NIRC, IR Cables (FG10-000-11)</li> <li>• CBL-ETH-FL2, Cat6 Ethernet Cable (FG10-2194-16)</li> <li>• CBL-ETH-FL, Ethernet Cat5e Flat Cable (FG10-2182-16)</li> <li>• EXB-IRS4, ICSLan IR/S Interface, 4 IR/S and 4 Inputs (FG2100-23)</li> <li>• EXB-COM2, ICSLan Serial Interface, 2 Ports (FG2100-22)</li> <li>• EXB-REL8, ICSLan Relay Interface, 8 Channels (FG2100-20)</li> <li>• EXB-I/O8, ICSLan Input/Output Interface, 8 Channels (FG2100-21)</li> <li>• EXB-MP1, ICSLan Multi-Port, 1 COM, 1 IR/S, 2 I/O, 1 IR RX (FG2100-26)</li> </ul>

ACTIVE POWER REQUIREMENTS	
Voltage, DC (Typical)	12 VDC
DC Current Draw	200 mA @ 12 VDC
Voltage DC Range	9 - 18 VDC
Power Connector	3.5mm Phoenix with retaining screws

POWER CONSUMPTION	
Active Power Consumption	3 W

ENVIRONMENTAL	
Temperature (Operating)	32° F to 122° F (0° C to 50° C)
Temperature (Storage)	14° F to 140° F (-10° C to 60° C)
Humidity (Operating)	5% to 85% RH
Heat Dissipation (Typical)	10.2 BTU/hr

ONBOARD MASTER	
Processor	1600 MIPS
Program Port	(1) USB Standard B
Configuration Dip Switch	4-position
Status Indicator	Status LED (green) blinks to indicate that the system is programmed and communicating properly
Input Indicator	Input LED (yellow) blinks to indicate that the Controller is receiving data
Output Indicator	Output LED (red) blinks to indicate that the Controller is transmitting data
ID Pushbutton	Black ID pushbutton for setting IP mode and reverting to default configuration and firmware

USB Host Port	(1) USB Standard A, USB Host port supports Solid State drive for upgrading firmware, loading code files, copying configuration data and remote storage
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MEMORY	
NVRAM	1 MB
Memory Card	4 GB SD
DDRAM	512 MB
Note	Supports external USB Solid State Drives

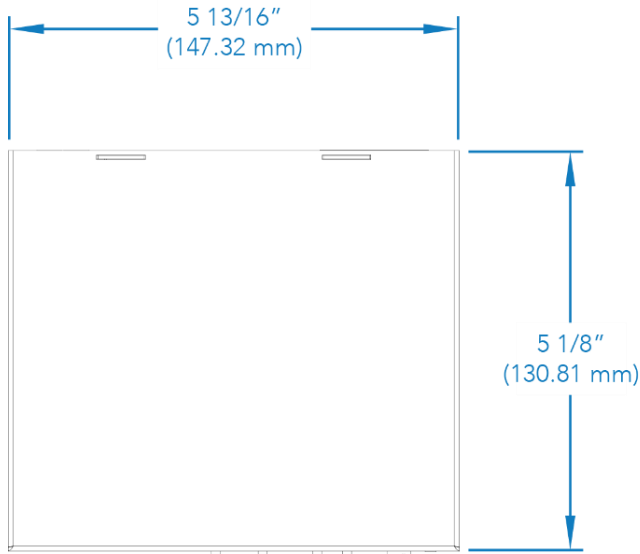
ETHERNET	
Connection	(1) RJ-45
Description	10/100 Port RJ-45 connector provides TCP/IP communication. Auto MDI/MDI-X enabled. Supports IPv4 and IPv6 networks. Supports HTTP, HTTPS, Telnet, FTP
Link/Act Indicator	Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
Speed Indicator	Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps

CONTROL PORTS & INDICATORS	
AxLink Port	(1) 4-position 3.5mm Screw Terminal, provides data and power to external AxLink control devices
AxLink Indicator	(1) AxLink LED (green) indicates the state of the AxLink port
RS-232/422/485 Port	(1) 10-position 3.5mm Screw Terminal NetLinx Port 1 XON/XOFF (transmit on / transmit off) CTS/RTS (clear to send/ready to send) 300 - 115,200 baud
RS-232 Port	(1) 5-position 3.5mm Screw Terminal NetLinx Port 2 XON/XOFF (transmit on / transmit off) CTS/RTS (clear to send/ready to send) 300 - 115,200 baud
Serial Indicator	(2) sets of LEDs (red/yellow) indicate when serial Ports 1 and 2 are transmitting and receiving data
IR/Serial	(2) 2-position 3.5mm Screw Terminal 2 IR Transmit / 1-way Serial ports NetLinx Ports 11-12 Support high-frequency carriers up to 1.142 MHz 2 IR/Serial data signals can be generated simultaneously
IR/Serial Indicators	(2) LEDs (red) indicate when each of the IR/Serial ports (11-12) are transmitting control data
I/O Channels	(4) One 6-position 3.5mm Screw Terminal 4-channel binary I/O port for contact closure with each input being capable of voltage sensing NetLinx Port 22 Channels 1-4
I/O Indicator	(4) LEDs (yellow) indicate each of the I/O

	channels (1-4) are active
IR/RX Ports	(1) 1/8" mini-jack
IR/RX Indicator	(1) IR RX LED (red) LED lights when IR data is being received via the IR/RX port



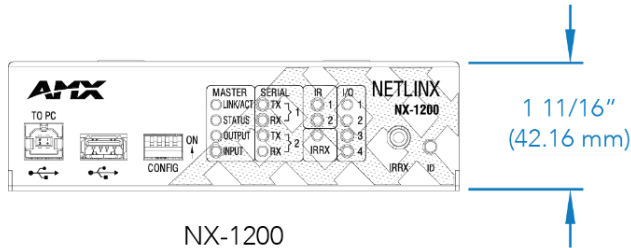
For a more detailed pictorial drawing please visit: <http://www.amx.com/products/NX-1200.asp>



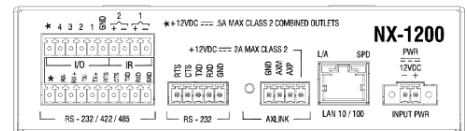
NX-1200  
(Top View)



NX-1200  
(Left View)



NX-1200  
(Front View)



NX-1200  
(Back View)

**About AMX by HARMAN**

Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 11.18.16. ©2016 Harman. All rights reserved. Specifications subject to change.

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