

**OpenBAS** BUILDING AUTOMATION SYSTEM

**Description**

Mircom's OpenBAS-LC-NX12R Lighting Controller with LED Display comes with fully customizable control logic, scheduling, trending, and alarms. The NX12R can seamlessly control up to 12 external lighting circuits per controller and 48 lighting circuits by daisy-chaining up to 4 NX12R Controllers together with the included cables.

In addition, the NX12R comes with a multiple protocol RS-485 field bus allowing for communication through many industry standard protocols, either as a master or a slave.

The NX12R has terminal connections for 12 external latching relays, 1 universal input, and an additional 2 inputs for manual ON / OFF / AUTO override toggle switching. The NX12R lighting controller includes an LED display indicating power and relay status.

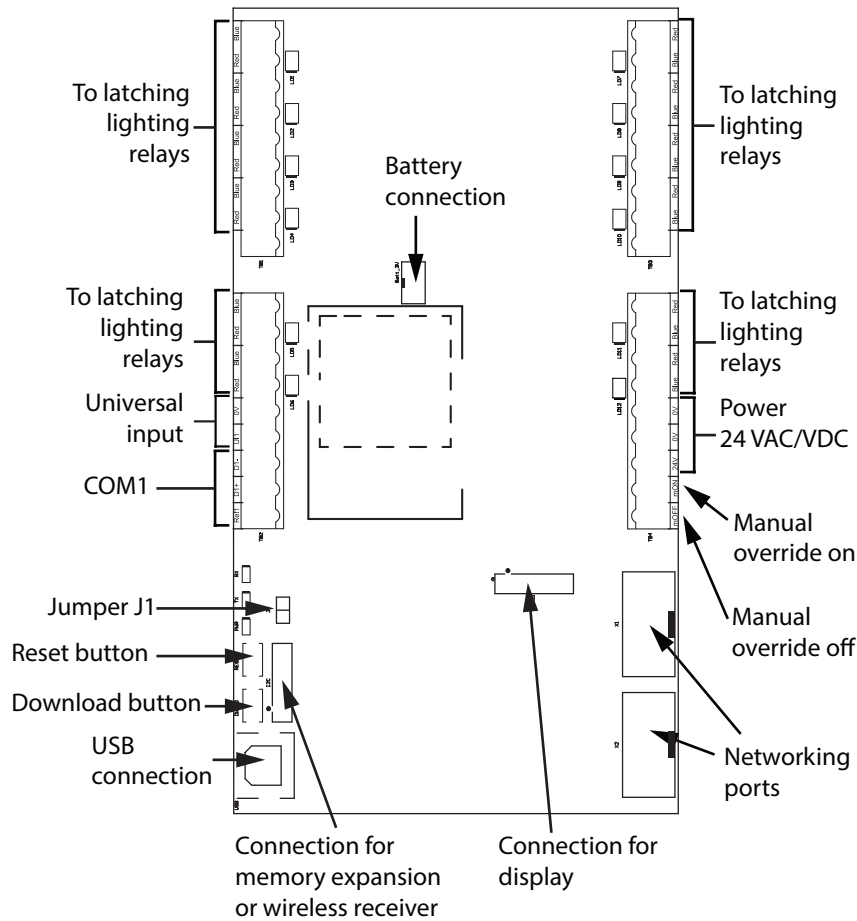
**Features**

- Modular design to cover any small, medium, or large projects.
- Standard field bus protocols to integrate into any existing BAS system such as: BACnet, Modbus, Optomux, N2-Open, ECM, and ASCII.
- Connects to OpenBAS-NWK-ETH3 controller for integration into IP networks and uses the most advanced features and protocols such as distributed computing, USB & Cloud storage, HTML5, JavaScript, XML, Ajax, SMS, and GSM.
- Remotely programmable via IP when paired with the OpenBAS-NWK-ETH3 controller or locally programmable via onboard USB and RS-485.
- Powerful Configuration Software supports ladder templates and script programs for an effortless solution.
- DIN rail mountable.
- Includes RTCC battery backup.
- Single solution provider – seamlessly integrates into Mircom's enclosures, boxes, and power supplies to provide the installer with a single supplier source.

**Typical Applications:**

- Lighting Control
- Scheduler
- Power Management

## Wiring Diagram



## Technical Information

<b>Standards</b>	UL 60730-1
<b>Input:</b>	24 Vdc, 400 mA max., or 24 Vac, 500 mA max.
<b>Power Supply Protection:</b>	Resettable Fuse 1.1 A
<b>Battery:</b>	FDK Corporation ML2430 Type: lithium Nominal capacity: 100 mAh Nominal voltage: 3 V Mircom part number: BT-025
<b>1 Universal Input</b>	<p><b>Analog Input:</b></p> <ul style="list-style-type: none"> <li>• 0-10 VDC</li> <li>• 0-5 VDC</li> <li>• 0.5-4.5 VDC ratiometric</li> <li>• 0-20 mA</li> <li>• 4-20 mA</li> <li>• 1000 <math>\Omega</math> temperature sensor</li> <li>• Thermocouple input with x200 amplifiers</li> </ul> <p><b>Digital (binary) input:</b></p> <ul style="list-style-type: none"> <li>• For dry contacts being fed by 12 VDC</li> </ul> <p><b>Pulse counter:</b></p> <ul style="list-style-type: none"> <li>• Active PNP 12 VDC</li> <li>• For dry contacts being fed by 12 VDC</li> </ul>

## Technical Information

<b>12 Outputs:</b>	24 Vdc, 350 mA nominal, 500 mA max., pulsed every 100 ms to relays
<b>2 Manual Override Inputs:</b>	24 VAC/VDC
<b>Communication Ports:</b>	<p>1 RS-485 port supporting the following protocols:</p> <ul style="list-style-type: none"> <li>• BACnet/MSTP</li> <li>• Modbus/RTU-Slave</li> <li>• Modbus/RTU-Master</li> <li>• N2-Open</li> <li>• Optomux</li> </ul> <p>BAUD Rate: 2400, 4800, 9600, 19200, 38400, 76800</p> <ul style="list-style-type: none"> <li>• 1 USB 2.0 port supporting the following protocols:</li> <li>• Optomux</li> <li>• ASCII</li> </ul> <p>2 I2C ports for memory expansion, LCD display, and OpenBAS-HV-RF433R</p> <p>2 ports (X1 and X2) only for networking up to 4 OpenBAS-LC-NX12R controllers (1 master and 3 slaves) supporting the following protocols:</p> <ul style="list-style-type: none"> <li>• N2-Open</li> <li>• Optomux</li> <li>• N2/O22-master</li> <li>• ASCII</li> <li>• ECM</li> </ul>
<b>Physical Characteristics:</b>	<p>Weight: 260 g (9.6 oz)</p> <p>Enclosure dimensions: 6 9/32" x 3 35/64" x 2 17/64" (160 mm x 90 mm x 58 mm)</p>
<b>Ambient Conditions:</b>	Operating Temperature: 0° to 40°C (32° to 104°F), 10% to 90% RH noncondensing Indoor Use Only
<b>Purpose of Control:</b>	Operating Control
<b>Construction of Control:</b>	Independently Mounted, for Surface Mounting
<b>Action Type and additional features:</b>	Type 1.C
<b>Pollution Degree:</b>	2
<b>Software Class:</b>	Class A
<b>Rated Impulse Voltage:</b>	24V circuits: 330V

## Ordering Information

Model	Description
OpenBAS-LC-NX12R	Lighting Controller with LED Display
BT-025	Replacement / Optional battery for NX10, NX12R, NXHALF, NXSF

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NOT TO BE USED FOR INSTALLATION PURPOSES.



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