touch-plate®
LIGHTING CONTROLS

PIC Statement

Vendor Name:	Touch-Plate® Lighting Controls
Product Name:	Nexus System Controller
Product Model Number:	NEX-MB
Applications Software Version:	1.5d
Firmware Revision:	2.48
BACnet Protocol Revision:	7 (135-2008)

Product Description:

This unit is a general purpose lighting controller that is capable of monitoring up to 128 inputs and controlling up to 64 outputs. The outputs can be a relays, dimmers, or a combination of both.

The 128 inputs are represented as binary input objects and the associated 128 LEDs are represented as analog value objects. All installed relays in the system are represented as binary output objects. The system can support Touch-Plate's relay firing cards.

The inputs and relays support subscribed Change Of Value (COV) operation. Relays can be overridden at the panel for maintenance and service purpose, which also could generate a COV as well. MS/TP MAC address, baud rate, I/O configuration may be set using DIP switches.

BACnet Standardized Device Profile (Annex L):

BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B, DS-RPM-B, DS-WP-B, DS-WPM-B, DS-COV-B, DM-DDB-B, DM-DOB-B, DM-DCC-B, DM-RD-B

Segmentation Capability: Not supported

Standard Object Types Supported:

STANDARD OBJECT TYPES SUPPORTED				
Object	Create	Delete	Optional Properties	Custom Properties
Binary Input	N	N	DEVICE_TYPE, RELIABILITY, INACTIVE_TEXT, ACTIVE_TEXT	---
Binary Output	N	N	DEVICE_TYPE, RELIABILITY, FEEDBACK_VALUE, INACTIVE_TEXT, ACTIVE_TEXT	---
Analog Value	N	N	---	---
Analog Output	N	N	DEVICE_TYPE, RELIABILITY	---

DataLink Layer Options: MS/TP master, baud rate(s): 9600, 19200, 38400, 76800

Device Address Binding: Is static device binding supported? No

Networking Options: No routing or BBMD functions are supported.

Character Sets Supported: ANSI X3.4

Table of Objects

			OBJECT EXPLANATION		
Table No.	Object	Object Type	Value	Object ID	Used For
BI1	Momentary Switch Inputs	Binary Input	0 = Off, 1 = On	BI1 - BI128	To report button presses of Control Stations
BI2	Maintain Switch Inputs	Binary Input	0 = Off, 1 = On	BI1001 - BI1128	To report button holds of Control Stations
BO1	Relays	Binary Output	0 = Off, 1 = On	BO1 - BO64	Relay control and status
AO1	Dimmers	Analog Output	0-100 %	AO1 – AO64	To control dimmers remotely
AV1	Control Station LED Modes	Analog Value	See chart in appendix for values.	AV1 -AV128	To control Control Stations flash, color, and intensity of LED lights
AV2	Device Options	Analog Value	1 = infinite COV On 0 = infinite COV Off	AV1000	To resubscribe to COVs with no expiration of the subscription write a 0 value for Lifetime when subscribing
AV3	Input Change Buffer	Analog Value	1-128 and 1001-1128	AV1001	To read button presses and releases remotely
AV4	Relay Override Status	Analog Value	0 = no manual override 1-64	AV1002	To remotely monitor relay manual overrides
AV5	Device Instance	Analog Value	0 - 4194303 Default: 68002-68100	AV1003	To read or change the Device ID or Device Instance
AV6	Input Emulation	Analog Value	1-128 = button press 1001-1128 = release of button 2001-2128 = quick press	AV1004	To simulate button presses, releases, and quick presses of control stations
AV7	Scene Trigger	Analog Value	1-128 = button press 1001-1128 = button release 2001-2128 = quick press	AV1005	Remotely triggers a scene with button presses, releases, and quick presses
AV8	Sensor Parameters	Analog Value	See AV12 for details	AV1##1-AV1##10	Reading and writing sensor parameters and levels
DO1	Device Object	Device Object	0 - 4194303	DEV68002- DEV68100	Describing properties of the device to the BACnet network

Notes:
- ## = 01 - 16 for each station address